

Crystallography (WS 2020/2021)



Lecture 1. Introduction

Lecture 2. Description of 2D crystal lattice

Lecture 3. Description of 3D crystal lattice

Lecture 4. Formation of real crystals. External morphologies

Lecture 5. Symmetry in crystals

Lecture 6. Symmetry of a crystal lattice

Lecture 7. Symmetry of a crystal lattice (continuation)

Lecture 8. Unit cell

Lecture 9. Point groups

Lecture 10. Space symmetry elements + 2D SPACE symmetry groups

Lecture 11. Space symmetry elements + 3D SPACE symmetry groups

Lecture 12. Space symmetry groups. Crystal structure

Recommended Literature

1. Phillips, F.C.: ” *An Introduction to Crystallography*”
2. C. Giacovazzo, et al.: “ *Fundamentals of Crystallography*”
3. Kleber, W., Bausch, H.-J., Bohm, J.: “*Einführung in die Kristallographie*“
4. Borchard-Ott, W: “*Kristallographie*”
5. Woolfson, M. M.: “*An Introduction to X-ray Crystallography*”



Recommended Websites

1. International Union of Crystallography - IUCr
<https://www.iucr.org/>
2. International Year of Crystallography
<https://www.iycr2014.org/>
3. Mineralogy Database
<http://webmineral.com/>