Textbooks for Crystal Structure Analysis

➢ V.K. Pecharsky and P.Y. Zavalij, <u>Fundamentals of powder diffraction and structural characterization of materials</u>, 2008

➢ C. Hammond, <u>The Basics of Crystallography and Diffraction</u>, 2015

➢ W. Ott, <u>Crystallography an Introduction</u>, 2011

➢ M. Birkholz, <u>Thin Film Analysis by X-ray Scattering</u>, 2005

➢ B.D. Cullity, S. R. Stock, and S. Stock, <u>Elements of X-ray Diffraction</u>, 2014

➢ D. Sherwood & J. Cooper, <u>Crystals, X-rays, and Proteins</u>, 2015

➢ A.D. Krawitz, <u>Introduction to Diffraction in Materials Science and Engineering</u>, 2001

➢ R. Jenkins and R.L. Snyder, <u>Introduction to X-Ray Powder Diffractometry</u>, 1996

➢ D.L. Bish and J. E. Post, <u>Modern Powder Diffraction, Reviews in Mineralogy</u>, 1989

➢ R. A. Young, <u>The Rietveld Method</u>, 1995

➢ H.D. Megaw, <u>Crystal structures</u>, Techbooks, 1973

➢ H.P. Klug, L.E. Alexander, <u>X-ray diffraction procedures</u>, Wiley-Interscience, 1989

---

crystallography

➢ Pecharsky - Chapter 1

➢ Cullity - Chapter 2

➢ Krawitz - Chapter 1, 2

➢ Hammond - Chapter 1, 2, 3, 4, 5, 6

➢ Sherwood & Cooper - Chapter 1, 3

➢ Jenkins & Snyder – Chapter 2

reciprocal lattice

➢ Hammond - Chapter 6

➢ Krawitz - Chapter 2.8, 2.9, 2.10

➢ Cullity - Chapter A1-1, A1-2, A1-3

➢ Sherwood & Cooper - - Chapter 8.11

basics of diffraction

➢ Hammond Chapter 8, 9, 10

➢ Pecharsky Chapter 2

➢ Sherwood & Cooper - Chapter 6

➢ Krawitz Chapter 5, 6

➢ Birkholz Chapter 1

properties of X-rays

➢ Krawitz - Chapter 3

➢ Cullity - Chapter 1

➢ Jenkins & Snyder – Chapter 1, 4, 5, 6

Fourier Transform

➢ Sherwood & Cooper - Chapter 5

Stereographic projection

➢ Krawitz, Page 48 ~ 62

➢ Cullity 3rd edition, Page 70 ~ 86

➢ Hammond, Chapter 12

Wave equation

➢ Sherwood & Cooper - Chapter 4

TEXTURE

➢ Krawitz Chap 11

➢ Hammond Chap 10

➢ Cullity Chap 14

➢ Dyson Chap 11

➢ Klug & Alexander Chap 10

Quantitative phase analysis

➢ Jenkins & Snyder Chap 13

➢ Cullity Chap 12

➢ Bish & Post Chap 5

➢ Klug & Alexander Chap 7

➢ Krawitz Chap 8

2-dim XRD

➢ Two-dimensional X-ray diffraction, Bob He