Crystallography Key Resources:

*Atlas of Crystal Structure Types for Intermetallic Phases 4 volumes Located: TN690.4.D33 1991 Engineering & Science Library Reference

*Binary Alloy Phase Diagrams **3 volumes** Located: TN690. B528 1990 Engineering & Science Library Reference

*Binary Alloy Phase Diagrams, Featuring: Crystal Structure Tables Located: Engineering & Science Library, loaded on 1 public computer

*Crystal Structures by R.W.G. Wyckoff 6 volumes Located: QD951 .W82 Engineering & Science Library Reference

*International Tables for Crystallography

A=Space-Group Symmetry B=Reciprocal Space C=Mathematical, Physical and Chemical Tables D=Physical Properties of Crystals Located: QD908 .I56 Engineering & Science Library Reference Available ONLINE at: <u>http://it.iucr.org</u> IUCr newsletter: http://ww1.iucr.org/news/

*International Tables for X-Ray Crystallography

Located: QD945 .I55 Engineering & Science Library Reference Volumes 1-3 Also at Mellon Institute Library: QD908 .I61 Volumes 1-4

*Landolt-Börnstein Numerical Relationships in Science and Technology Located: QC61 .L332 Engineering & Science Library Reference Crystal structure volumes:
III, pt. 5 and III, pt. 10: Structure Data of Organic Crystals
III, pt. 6 and III, pt. 14: Structure Data of Elements and Intermetallic Phases
III, pt. 7: Crystal Structure Data of Inorganic Compounds
III, pt. 8: Epitaxy Data of Inorganic and Organic Crystals
IV, pt. 7: Liquid Crystals

*Pearson's Handbook: Crystallographic Data for Intermetallic Phases 2nd edition, 4 volumes and Desk Edition, 2 volumes Located: TN690.4 .V55 Engineering & Science Library Reference

*Smithells Metals Reference Book

Located: TN 671 .S55 2004 Engineering & Science Library Reference Also available thru Knovel: <u>http://www.knovel.com/knovel2/library/default.jsp</u>

*Structure reports / International Union of Crystallography Located: 548.05 S48A Engineering & Science Library Reference

Crystallography Select online resources and databases:

American Crystallographic Association: <u>http://aca.hwi.buffalo.edu/</u> Featuring: Crystallographic resources & definition for: What is Crystallography?

American Mineralogist Crystal Structure Database

http://rruff.geo.arizona.edu/AMS/amcsd.php

CRC Handbook of Chemistry and Physics (Online) http://hbcpnetbase.com/

Crystal Lattice Structures/NRL, Center for Computational Materials Science: <u>http://cst-www.nrl.navy.mil/lattice/</u>

Crystallography and Crystallographic Information prepared by Greg Youngen, Physics/Astronomy Librarian, University of Illinois at Urbana-Champaign http://www.library.uiuc.edu/phx/crystal/crystalrev.html

Crystallography and Phase Equilibria, A Review: Part 1- Basics, Journal of Phase Equilibria and Diffusion provided by ASM http://www.asminternational.org/pdf/spotlights/JPED2505p405.pdf

International Union of Crystallography http://www.iucr.org/

Reciprocal Net <u>http://www.reciprocalnet.org/index.html</u> "a distributed crystallography network for researchers, students and the general public"

SciFinder Scholar – Chemical Abstracts http://www.library.cmu.edu/Search/DB/scifinder.html Featuring: Substances Search, Substance Identifier—Get References for: Crystal Structure Refine a Research topic by "Crystal Structure"

On Reserve at the Engineering and Science Library Circulation Desk: **Structure of Materials: An Introduction to Crystallography, Diffraction and Symmetry** by Marc De Graef and Michael E. McHenry TA403.6 .D447X 2007

> Donna Beck Engineering Librarian

Phone: x8-7213 donnab@andrew.cmu.edu