

CHEM 681, Winter 2015

UNIVERSITY OF CALGARY
DEPARTMENT OF CHEMISTRY
COURSE OUTLINE
Winter 2015

COURSE: CHEMISTRY 681, X-ray Crystallography

LEC	DAYS	TIME	ROOM	INSTRUCTOR	OFFICE	PHONE	EMAIL	OFFICE HOURS
L01	TBA	TBA	TBA	Dr. M. Parvez	SB 331	220-5348	parvez@ucalgary.ca	TBA

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TEXTBOOK: The textbook for this course is: Understanding Single-Crystal X-ray Crystallography, ed. Dennis W. Bennett, 2010 edition, Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim.

TOPICS INCLUDED AND SUGGESTED READING:

X-rays, Scattering & Diffraction
Lattice, Symmetry & Space Groups
Structure Factor
Crystals
Data Collection
Data Processing
Solving Structures
Refinements
Analysis of Results - Discussion
Crystal Information File (**cif**)

Reference Books: CHEM681, Winter 2015

Structure Determination by X-ray Crystallography; M.F.C. Ladd & R.A. Palmer; Kluwer Academic/Plenum Publishers, New York, Boston, Dordrecht, London, Moscow; 4th Edition; Ed 2003.

X-ray Structure Determination - A Practical Guide, George, H. Stout & Lyle, H. Jensen; A Willey - Interscience publication, NY/Toronto; 2nd Edition; Ed 1989.

Crystal Structure Analysis for Chemists and Biologists. Jenny P. Glusker with Mitchell Lewis & Miriam Rossi, 1994 Ed.

X-ray Analysis and the Structure of Organic Molecules; Jack, D. Dunitz; Cornell University Press, Ithaca/London; 1979 Ed.

International Tables for Crystallography; Theo Hahn; D. Reidel Publishing Company, Dordrecht/Boston/Lancaster/Tokyo; Volume A; 2nd Revised Edition; 1987 Ed.