

UNIVERSITY OF CALGARY
DEPARTMENT OF CHEMISTRY
COURSE SYLLABUS
WINTER 2015

COURSE: CHEMISTRY 629-02 Selected Topics in Inorganic Chemistry

LEC	DAYS	TIME	ROOM	INSTRUCTOR	OFFICE	PHONE	EMAIL	OFFICE HOURS
L01	TR	14:00-15:15	ENA235	Dr. Shimizu	SB 403	220-5347	gshimizu@ucalgary.ca	TBD

TEXTBOOK: None

TOPICS COVERED AND SUGGESTED READING:

"Traditional" Porous Solids- Preparation and Chemistry

Metal Organic Frameworks – Preparation including principles of self-assembly

Characterization of (porous) solids –Powder XRD

Characterization of (porous) solids –Thermal analyses

Characterization of porous solids –Gas Sorption

Targets for porous solids- gas capture and storage

Flexible MOF materials

Covalent Organic Frameworks

Intrinsically porous solids

Applications of MOF materials (Catalysis, ion conduction, sensors)