

Please fill the below in as completely as possible and indicate the proposed structure or the reaction leading to the submitted sample. Include all instructions for sample handling and measurement parameters and any known hazards for the sample. Online submission at: [www.iumsc.indiana.edu](http://www.iumsc.indiana.edu). With the submission of the form and sample, you authorize to charge the below listed account.

**Date Submitted:** \_\_\_\_\_ **Account/PO:** \_\_\_\_\_

**Submitters Name:** \_\_\_\_\_ **Email Address, Phone:** \_\_\_\_\_

**Research Group or Affiliation:** \_\_\_\_\_ **Email PI:** \_\_\_\_\_

**Sample Name/Code:** \_\_\_\_\_

Please use one sheet per sample and label all vials of the sample with the code listed above.

**Request:** Powder Diffraction                      PXRD with XRK900  
                 Reflectometry                              Texture, Stress and Strain

### Single phase

Anticipated empirical formula: \_\_\_\_\_

### Multi phase

Anticipated empirical formulas:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Desired specimen preparation** \_\_\_\_\_

### Radiation

Molybdenum (Mo)      Copper (Cu)      Other: \_\_\_\_\_

### Desired measurement parameters

Temperature/K      \_\_\_\_\_      Pressure/atm      \_\_\_\_\_  
Step width/°      \_\_\_\_\_      Time per step      \_\_\_\_\_  
2θ range      \_\_\_\_\_      Other comments      \_\_\_\_\_

### Sample Stability

Stable in open container at RT  
Other: \_\_\_\_\_

### Sensitivity

Air                      Water                      Light  
Other: \_\_\_\_\_

### For IUMSC use only

Radiation      \_\_\_\_\_  
Specimen  
    \_\_\_ Flat/zero background  
    \_\_\_ Flat/backmount  
    \_\_\_ Flat/kapton foil  
    \_\_\_ Flat/solid on xyz-stage  
    \_\_\_ Capillary  
    \_\_\_ other: \_\_\_\_\_  
Experiment  
    \_\_\_ Reflection  
    \_\_\_ Transmission  
    \_\_\_ other: \_\_\_\_\_  
Temperature/K      \_\_\_\_\_  
Pressure/atm      \_\_\_\_\_  
Step width/°      \_\_\_\_\_  
Time/s      \_\_\_\_\_  
2θ range      \_\_\_\_\_  
Comments      \_\_\_\_\_  
\_\_\_\_\_  
Crystallographer      \_\_\_\_\_

**Special Instructions / Precautions:** \_\_\_\_\_

**Other notes and comments:** \_\_\_\_\_

PXRD data are stored on the main server of the lab. All sample vials must be labeled. Unmarked samples will be discarded. It is recommended that any sample believed to be air, moisture or otherwise sensitive be submitted in more than one container. You will receive frequent email notification on your sample processing. Please pick up your vials after completed analysis.