

# CURRICULUM VITA

## THOMAS L. GROY

SCHOOL OF MOLECULAR SCIENCES  
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### SUMMARY OF QUALIFICATIONS

1986 – PRESENT ARIZONA STATE UNIVERSITY

Managed X-ray diffraction facility that serves both single-crystal and powder diffraction needs for the entire campus. Utilized a multi-user instrumentation grant (NSF 2008) to purchase a state-of-the-art research powder diffractometer with twelve different possible configurations. Co-authored a multi-user instrumentation grant (NSF 1998), which was used to purchase the first Bruker SMART APEX CCD system sold in the United States (installed February, 2000). Responsibilities have included solving single crystal structures, analyzing powder samples, providing wafer and single crystal orientation information, maintaining all instruments, maintaining billing records, providing hands-on training for all data collection and analysis, teaching graduate courses in X-ray diffraction, authoring X-ray sections of submitted manuscripts, and writing software for various requirements of the facility. Managed nine instruments including one CCD single crystal, one research powder with twelve configurations, one standard powder with PSD detector, one rotating anode image plate single crystal, one serial four-circle single crystal, one specialized rotating anode powder for high temperature and texture analysis, one Guinier powder and thin film, one standard powder, and one Laue camera.

### EDUCATION AND EXPERIENCE

1986 – PRESENT ARIZONA STATE UNIVERSITY

Academic Professional, Manager of X-ray Diffraction Facility, Department of Chemistry and Biochemistry

1983 – 1985 ARIZONA STATE UNIVERSITY

Visiting Assistant Professor, Department of Chemistry and Biochemistry

1977 – 1982 ARIZONA STATE UNIVERSITY

Ph. D., Physical Chemistry; Thesis Advisor – Prof. Sheng H. Lin

“A theoretical study of high energy electron scattering by clusters and time-resolved X-ray scattering by reacting solids”

1973 - 1976 ADAMS STATE UNIVERSITY OF COLORADO

B. S., Summa Cum Laude (GPA 3.98), Major in Chemistry; Minors in Physics and Mathematics; Advisor – Prof. Michael Z. Lowenstein

### RESEARCH INTERESTS

- Structure solution and refinement of single crystal X-ray diffraction data.
- Ab initio structure solution and refinement using powder X-ray diffraction data.
- Finding alternative methods to the solution of the “phase problem” utilizing the phase distribution patterns of known structures.

## PROFESSIONAL ACTIVITIES AND MEMBERSHIPS

Referee manuscripts submitted to

- Journal of Solid State Chemistry
- Inorganica Chimica Acta
- Journal of Chemical Crystallography
- Zeitschrift für Kristallographie
- Journal of Chemical Education
- Acta Crystallographica

University Service

- Dean's Academic Professional Advisory Council (2014-2017, elected)
- Search Committee for the Department Chair (2005-2006, elected)
- University Radiation Safety Committee (2004-2007, membership requested by Committee)
- Academic Professional Personnel Committee for the Department of Chemistry and Biochemistry (1993-1996, elected; 1997-2000, elected; 2003-2006, elected)
- Affirmative Action Representative for Academic Professionals in the Department of Chemistry and Biochemistry (2000-2002, appointed)
- Dean's Academic Professional Advisory Council (1993-1996, elected; 1997-2000, elected)

Memberships

- American Crystallographic Association
- American Chemical Society  
1988      President, Central Arizona Section of the American Chemical Society

## PUBLICATIONS AND SOFTWARE DEVELOPED

See attached

## REFERENCES

Available on request