

# Joseph H. Reibenspies Ph.D.

---

Manager of X-ray Diffraction Laboratory  
Senior Research Instrument Specialist  
Member of the Graduate Faculty, Texas A & M University  
Born 1958 Married

## Experience

### **1987-present      Department of Chemistry      Texas A & M University**

#### Associate Director of X-ray Diffraction Laboratory

- Established the X-ray Diffraction Laboratory at the Department of Chemistry, Texas A & M University in 1987.
- Management experience with large laboratories and personal.
- Educator: Instructor for first year chemistry (1998-2002) both first and second semester, at Blinn College, Bryan Campus.
- Experienced crystallographer and X-ray powder diffractonist. Responsible for the maintenance and use of three Bruker SMART1000 CCD single-crystal diffractometers, two Bruker D8 X-ray powder diffractometers, a Bruker D8 GADDS powder/single-crystal diffractometer and two Bruker Small Angle X-ray Scattering instruments.
- Experience consultant in good laboratory practices (GLP), pharmaceuticals, process analytical control and nano-materials
- Extensive experience in the theory, operation and maintenance of single-crystal and powder x-ray diffractometers.
- Extensive knowledge of structure solution from single-crystal and powder data. Including structure solution, qualitative and quantitative analysis, polymorph identification and elucidation.
- Structural Chemist, with knowledge of absolute configuration, molecular structure and chemical processes.
- Over 5000 structures completed (data collection, solved and refined)
- Specializing in crystal growth and powder handling techniques.
- Specializing in x-ray powder analysis of pharmaceuticals, organic and inorganic materials.
- SAXS specialist in nano-material characterization.
- Established X-ray training facilities in the Department of Chemistry.
- Past member of the Radiological safety committee for Texas A & M University. .
- Experienced negotiator. Personally negotiated the contract for the purchase of three Bruker Smart 1000 single-crystal X-ray Diffractometer in 1999, four Bruker powder diffractometers in 2001 and two Bruker Small Angle X-ray Scattering instruments in 2002.
- Editor for the Journal of Arabian Science and Engineering (1998-1999)
- Editor/Author "Principles and Applications of Powder Diffraction", Wiley, New York (2008)
- Member of the President's Task force for Staff Council Formation (2007)
- Member of the National Science and Engineering Research Council of Canada, MRS review committee (2008)
- Member of the U.S. National committee for Crystallography (NAS) (2010-2016)
- Member of the Data and Standards Committee (American Crystallographic Association) (2011-2014)

**1982-1987 Department of Chemistry Colorado State University**

Manager of X-ray Diffraction Laboratory

- Managed X-ray diffraction facilities as part of graduate studies.
- Installed and maintained major instrumentation for the department.
- Implemented training course for new users.

Education

**1982 - 1987 Colorado State University Fort Collins, CO**

Ph.D.

- Doctorate in Inorganic Chemistry, Research Advisor : Oren Anderson  
Field: Chemical crystallography, copper coordination chemistry.  
Dissertation title: "Polynuclear Copper Coordination Complexes"

**1980 - 1982 Wichita State University Wichita, KS**

M.S.

- Masters in Inorganic Chemistry, Research Advisor : Richard Cornelius  
Field: Synthesis and reactivity of cobalt phosphate complexes  
Dissertation title: "Linkage Isomerization and Phosphate Hydrolysis in  
 $\text{Co}(\text{NH}_3)_4\text{H}_2\text{P}_3\text{O}_{10}$ "

1976 – 1980 Wichita State University Wichita, KS

B.S.

- Accreditation by the American Chemical Society

Awards

Associations

Publications

Presidents Meritorious Service Award (2001) Texas A & M University  
Graduate Student Teaching Award (1982) Colorado State University  
University Fellow (1980) Wichita State University  
X-ray Safety Certification (1987, 1997, 2002, 2006)  
Over 406 peer reviewed publications  
American Crystallographic Association  
American Physical Society

Most Recent

Speaking

Engagements

Invited Speaker :  
American Crystallographic Conference, Orlando FL July 2005  
Pharmaceutical X-ray Powder Symposium, Somerset NJ, February, 2006  
2006 Frontiers in Pharmaceutical Research, Chicago May 2006  
2006 Frontiers in X-ray Diffraction Analysis, Boston, September 2006.  
2007 Denver X-ray Conference, Colorado Springs.  
2007 Frontiers in Pharmaceutical Research (West) San Diego, CA  
2007 Frontiers in Pharmaceutical Research (East) Baltimore, MD  
2008 Denver X-ray Conference, Denver Co (invited speaker)  
2009 American Crystallographic Association (invited speaker)  
2010 American Crystallographic Association (invited speaker)  
2011 American Crystallographic Association (invited speaker)  
2012 Frontiers in X-ray Diffraction Analysis (Albany, NY) (invited speaker)