

# Joseph H. Reibenspies Ph.D.

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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**

Manager of X-ray Diffraction Laboratory

- Established the X-ray Diffraction Laboratory at the Department of Chemistry, Texas A & M University in 1987.
- **Manager** with 22 years experience in managing large laboratories and personal.
- **Educator:** Instructor in X-ray Diffraction, Dept. Biochemistry and Biophysics, Texas A & M University (1991-1998). Instructor for first year chemistry (1998-2002) Blinn College, Bryan Campus.
- **Experienced crystallographer and X-ray powder diffractionist.** Responsible for the maintenance and use of **three** Bruker APEX II and **two** SMART1000 CCD single-crystal diffractometers, **two** Bruker D8 X-ray powder diffractometers, a Bruker D8 GADDS powder/single-crystal diffractometer, **two** Bruker NANOSTAR Small Angle X-ray Scattering instruments, a Nonious FR591 Rotating Anode and a Rigaku RU200 rotating anode.
- **Consultant** in good laboratory practices (GLP), pharmaceuticals, process analytical control, environmental science 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 molecular structure and chemical processes.
- Over 5000 structures completed (data collection, solved and refined)
- **Specialist** in crystal growth and powder handling techniques.
- **Specialist** in X-ray powder analysis of pharmaceuticals, organic and inorganic materials.
- **Specialist** in 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 diffractometers in 2001, two Bruker Small Angle X-ray Scattering instruments in 2002 and two Bruker APEXII diffractometers in 2008.
- **Editor** for the Journal of Arabian Science and Engineering (1998-1999)
- **Editor/Author** of the X-ray diffraction book : "Principles and Practice 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)

**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 (2000) 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)  
Registered User Advanced Photon Source (2002-Present)  
Over 364 peer reviewed publications  
American Crystallographic Association  
American Physical Society  
Security Clearance – Level 1 – Confidential

Most Recent

Speaking

Engagements

Invited Speaker :  
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 Advances in NanoSciences, UTD Dallas Texas  
2008 X-ray Diffraction Seminar, Michigan State University,  
2009 American Crystallographic Association Meeting, Toronto Canada