

## Curriculum Vitae

**Harry Joseph Elston, Ph.D., CIH**

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Midwest Chemical Safety  
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### Education

Ph.D. Columbia Pacific University, College of Arts and Sciences,  
San Rafael, CA. 1996.

Doctoral Dissertation: *Molecular Dynamics in p-Difluorobenzene-Ar van der Waals Molecules. Rotational Effects of Dissociation, Heavy Molecule Spectroscopy and Dissociation Dynamics.*

M.S. Indiana University, Bloomington, IN. Physical Chemistry,  
1992.

B.S. Hillsdale College, Hillsdale, MI. Chemistry and Physics,  
1984.

### Professional Certification

Diplomate, American Board of Industrial Hygiene. (Comprehensive Practice). Certificate number 8258, 2002-Present.

Certified Chemical Hygiene Officer, National Registry of Certified Chemists, (Number 2421), 1997-Present.

## Professional Societies

American Chemical Society, 1990-Present  
Division of Physical Chemistry, 1990-1995  
Division of Chemical Health and Safety, 1995-Present

American Industrial Hygiene Association, 2003-Present.

American Nuclear Society, 1992-1994

## Professional Experience

Illinois Department of Nuclear Safety, Springfield, IL. Nuclear Safety Scientist and Chemical Hygiene Officer. 1992-Present.

Midwest Chemical Safety, Dawson, IL. Principal. 1996-Present.  
(Midwest Chemical Safety specializes in chemical safety consulting, formulating chemical hygiene plans and facility safety plans, emergency preparedness, chemical safety training, emergency management, crime scene safety (clandestine laboratories) and occupational/industrial hygiene consulting services.)

U.S. Navy. USS Theodore Roosevelt, CVN-71, Norfolk VA. Nuclear Engineer and Chemistry/Radiological Controls Assistant, (Radiation and Chemical Safety Officer). 1982-1988.

## Professional Involvement

**Editor in Chief**, *Chemical Health & Safety*, 1999-Present

**Board of Editors**, *Chemical Health & Safety*, 1998-1999.

**Certification Examination Committee**, National Registry of Certified Chemists, 2000. (Chemical Hygiene Officer Examination)

**American Industrial Hygiene Association Publication Committee**, Committee Member. 2002-Present

**American Chemical Society Committee on Chemical Safety**. Associate Member, 2003-Present.

## **Awards and Honors**

**Howard Fawcett Chemical Health and Safety Award**, Division of Chemical Health and Safety, American Chemical Society, 2003.

**Fellow**, Division of Chemical Health and Safety of the American Chemical Society, 2003.

## **Adjunct Teaching Experience**

Adjunct Professor of Mathematics and Chemistry. Richland Community College, Decatur, IL.

- Fall 1993: Mathematics 091, Basic Algebra, 4 hours.  
Mathematics 160, Finite Math, 4 hours.
- Spring 1994: Mathematics 091, Basic Algebra, 4 hours.  
Chemistry 100, Basic Chemistry, 4.5 hours.
- Fall 1994: Mathematics 091, Basic Algebra, 4 hours.  
Mathematics 115, Intermediate Algebra, 4 hours.
- Spring 1995: Mathematics 098, Intermediate Algebra, 4 hours.  
Mathematics 091, Basic Algebra, 4 hours.
- Fall 1995: Mathematics 091, Basic Algebra, 4 hours.  
Mathematics 160, Finite Math, 4 hours.
- Fall 1997: Mathematics 104, Technical Math, 4 hours.  
Mathematics 087, Basic Mathematics, 3.5 hours.

## **Community Involvement**

Lakeside Christian Church, Springfield, IL. Deacon, 1993-1995, 1998-1999.

Springfield Youth Symphony, Springfield, IL.  
Parent/Sponsor. 2000-Present

Springfield Area Christian Home Educators, Springfield, IL.  
Member. 2000-Present

Illinois High School (Athletic) Association. Baseball/Softball  
Official, 1992-Present

Indiana High School Athletic Association. Baseball Official,  
1989-1992.

Michigan High School Athletic Association. Baseball Official,  
1978-1988

## Publications

1. Harmonic mode scrambling in *p*-difluorobenzene. With E.R. Davidson and C.S. Parmenter. *Chem. Phys. Lett.*, **1992**, 197, 123.
2. Vibrations of S<sub>1</sub> (<sup>1</sup>B<sub>2u</sub>) *p*-Difluorobenzene-*d*<sub>4</sub>. S<sub>1</sub>-S<sub>0</sub> Fluorescence Spectroscopy and ab Initio Calculations. With E.R. Davidson, C.S. Parmenter and F.G. Todd. *J. Phys. Chem.*, **1993**, 97, 5506.
3. Influences of Internal Rotation on Vibrational Predissociation Dynamics. With B.D. Gilbert, C.S. Parmenter, H.-K. Oh, T.A. Stone, M.-C. Su and Z.Q. Zhao. *Proceedings of the 6th International Conference on Time Resolved Vibrational Spectroscopy, 1993*. A. Lau ed. (Heidelberg: Springer-Verlag, 1994).
4. Managing Chemical Spills in the Laboratory: How Big is Too Big? With William E. Luttrell. *Chem. Health Safe.*, **1997**, 4(2), 10-13.
5. Designing Effective Laboratory Safety Programs. With William E. Luttrell. *Chem. Health Safe.*, **1997**, 4(4), 11-13.
6. The OSHA Laboratory Standard. "Regs in Review." *Facility Care*. **1997**, 2(8), 8.
7. The CHO's Spectrum of Responsibilities. With William E. Luttrell. *Chem. Health Safe.*, **1998**, 5(3), 15-18.
8. A Whistle-stop Tour of OSHA for Laboratories: Regulations and Standards for the Chemical Hygiene Officer (I). *Chem. Health Safe*. **1998**, 5(6), 9-11.
9. The Methylene Chloride Standard. "Federal Regs." *Compliance*. **1998**, 5(10), 10.
10. Environmental Regulations for the Chemical Hygiene Officer: Regulations and Standards for the Chemical Hygiene Officer (II). With Neal Langerman. *Chem. Health Safe*. **1999**, 6(2), 11-14.
11. Regulations and Standards for the Chemical Hygiene Officer (III)-NFPA and ANSI. *Chem. Health Safe*. **1999**, 6(5), 33-36.
12. The CHO's Eye-Q Examination (I) – General Laboratory Safety. With Douglas Walters. *Chem. Health Safe*. **2000**, 7(6), 5-8.

13. The CHO's Eye-Q Examination (II) – Ventilation. With Douglas Walters. *Chem. Health Safe.* **2000**, 7(6), 26-28.
14. The CHO's Reference Library. With Jay Young and the Board of Editors to *Chemical Health & Safety*. *Chem. Health Safe.* **2001**, 8(1), 6-7.
15. Medical Management Guidelines for Acute Chemical Exposures. With Larry Morris. *Chem. Health Safe.* **2002**, 9(6), 8-10.
16. Funding Safety Activities in Secondary Schools. With William C. Penker. *J. Chem. Ed.* **2003**, 80, 1401-1402.

### **Dissertation**

Molecular Dynamics in *p*-Difluorobenzene-Ar van der Waals Molecules. Rotational Effects of Dissociation, Heavy Molecule Spectroscopy and Dissociation Dynamics. Ph.D. Dissertation. Columbia Pacific University, San Rafael, CA. 1996.

### **Presentations**

1. *Rotational Energy Distributions After Vibrational Predissociation from p-difluorobenzene-Ar van der Waals Complexes.* 45th Molecular Spectroscopy Symposium, Columbus, OH, 1990.
2. *p-Difluorobenzene-d<sub>4</sub> S<sub>1</sub> Vibrational Spectroscopy.* American Chemical Society Regional Meeting, Indianapolis, IN, 1991.
3. *A New Look at an old Molecule: The Vibronic Spectroscopy of p-Difluorobenzene-d<sub>4</sub>.* 46th Molecular Spectroscopy Symposium, Columbus, OH 1991.
4. *Essential Elements of Laboratory Safety.* Downstate Illinois Occupational Safety and Health Day, Peoria, IL, 1997. (Invited paper).
5. *Combating Radioactive Spills in Semi-Confined Spaces: Personnel and Contamination Considerations.* American Chemical Society National Meeting, April 2000. (Invited paper).
6. *Counting the Cost: Establishing an Emergency Response Team.* Laboratory Safety and Environmental Management Conference, Alexandria VA. July 2000. (Invited paper).

7. *Should we or shouldn't we? Is an Emergency Response Team Right for Your Organization?* Campus Safety, Health and Environmental Managers Association Conference, College Station, TX. July 2001. (Invited paper).
8. *What if? The Balance of Safety in Extremis and Productivity.* American Chemical Society National Meeting, August 2001. (Invited Paper)
9. *Fixed Radiation Instrumentation for Analytical Laboratories.* American Chemical Society National Meeting, August 2001.
10. *Portable Radiation Monitoring Equipment for Hazardous Materials Emergency Response Incidents.* American Chemical Society National Meeting, August 2001.
11. *Funding Safe Science in Secondary Schools.* American Chemical Society National Meeting, March 2003. (Invited Paper).
12. *The Future of Chemical Safety, Leading From the Front.* Division of Chemical Health and Safety Howard Fawcett Award Address. American Chemical Society National Meeting, September 2003. (Invited Paper).
13. *Alternative Careers for Chemists.* Panel Discussion. Division of Chemical Health and Safety, American Chemical Society National Meeting, March 2004. (Invited Panelist).