

PROFESSIONAL RESUME

JOSEPH HOWARD ROMIG

Ponderosa Associates, Ltd.
1499 W 120th Ave, Suite 120
Westminster, CO 80234
Phone: 303/666-8112
e-mail: jromig@ponderosa-assoc.com

EDUCATION

Ph.D. –Astrogeophysics, University of Colorado, 1975
M.S. –Plasma Physics, Oxford, 1965
B.A. –Physics, University of Colorado, 1963

PROFESSIONAL EXPERIENCE

1994 – present	Consultant, Ponderosa Associates, Ltd. Westminster, CO (Partner, 1990-2019)
1981 – 1994	Vice President, Radiophysics, Inc Boulder, CO (Part time Position)
1980 – 1994	Consultant, Ponderosa Associates, Ltd. Lafayette, CO (Part time Position)
1980 – Present	Consultant in Applied Physics and Engineering
1975 – 1980	Consultant in Applied Physics and Geophysics, Boulder, CO
1975 – 1976	Research Scientist, Science Applications, Inc. Boulder, CO
1971 – 1975	Research Scientist, Martin-Marietta Aerospace Denver, CO
1966 – 1971	Research Assistant, Radio Astronomy Observatory University of Colorado Boulder, CO
1970 - 2004	Instructor, Continuing Education, University of Colorado Boulder, CO (Part time Position)

ACCIDENT RECONSTRUCTION

- Origin and cause of gas, mist and dust explosions
- Analysis of gas, mist and dust release, migration and build-up
- Gas, mist and dust explosion analysis and modeling
- Release and migration of flammable and combustible vapors, both above ground and underground
- Origin and cause of residual, commercial, industrial, and vehicle fires
- Fire and smoke propagation and build-up
- Analysis of equipment failure leading to an explosion, fire or carbon monoxide production
- Evaluation of ignition sources
- Pyrotechnic analysis and explosion modeling
- High explosive analysis and explosion modeling

PROFESSIONAL SEMINARS

- Magnatek Panel Member; IAAI Conference, Denver, CO May 3, 2006

- International Symposium on Fire Investigation
(June 27-30, 2004, Fire Service College Moreton-in-Marsh Gloucestershire, UK)
- Certified Vehicle Fire Investigator (NAFI: course w/exam October 2, 2002).
- 2002 Vehicle Fire, Arson & Explosion Investigation Science & Technology Seminar
(September 30-October 2, 2002; Co-Sponsors NAFI and Fire and Safety Engineering Technology Eastern Kentucky University).
- 37th Annual Fire Investigation Seminar, (Metropolitan Arson Investigators Association, Inc.,
May 6-10, 2002, Grand Junction, CO, Instructor)
- Vision 2000 Conference: Fire Dynamics; Fire Patterns (IAAI Saskatchewan Chapter #54;
November 13-16, 1999; 24 hours; tested and passed)
- Certified Fire Investigation Instructor (NAFI: course w/exam August 9, 1999)
- Investigation of Gas and Electric Appliance Fires (Fire Findings Seminar; November 14 & 15, 1998;
16 hour course; tested and passed)
- Advanced Arson Investigation Seminar (Denver Fire Department/Colorado Division of Fire Safety/Bureau of
Alcohol, Tobacco & Firearms; September 14-18, 1998; 40 hour course; tested and passed)
- Certified Fire and Explosion Investigator (NAFI: exam July 31, 1998; Seminar Renewal every 5 years)
- 1998 National Fire, Arson, and Explosion Investigation Training Program
(July 28-31, 1998; Co-Sponsors NFPA and NAFI)
- Seminar: Fundamentals of Mathematical Computer Fire Modeling (NAFI: July 27, 1998)

MAIN AREAS OF APPLIED RESEARCH

- Hydrocarbon leaks
- Detection of methane, ethane, propane, butane and heavier hydrocarbons
- Detection of carbon monoxide
- Detection of heat and smoke
- Gas explosions
- Fire origin and propagation
- High explosives
- Secondary recovery of oil and gas by use of electromagnetically generated shock waves
- Search for natural resources using electromagnetic fields
- Energy storage in high dielectric media
- Glass coatings

PATENTS

“Process for Improved Glass Article Coating, and Such Coated Articles”
Fogelberg, Clement and Romig, Joe. U. S. Patent 4,289,816, September 15, 1981
(Patent also held in approximately fourteen foreign countries.)

MEMBER

- National Fire Protection Association
- National Association of Fire Investigators
- International Association of Arson Investigators
- International Association of Arson Investigators: Colorado Chapter
- American Association for Advancement of Science
- American Physical Society
- American Geophysical Union
- New York Academy of Sciences
- American Association of Rhodes Scholars
- Sigma Xi
- Phi Beta Kappa

GUEST LECTURER

“Fires and Explosions”

Sigma Xi, University of Colorado, November 4, 1997

“Accidental Fires and Explosions”

Combustion Research Institute, University of Colorado, September 23, 1996
Fall 1996 Seminar Series

“Forensic Engineering – Fires and Explosions”

Engineering Seminar, University of Denver, April 10, 1996

“Investigating a Toxic Tort Case – Underground Storage Tank Leakage”

Colorado Trial Lawyers Association, February 23, 1990