

# Michele N. Shepard, PhD, MS, CIH Vice President and Senior Scientist

## **Summary of Qualifications**

- 20+ years of environmental health and safety (EHS) experience in consulting, industry, and academic research.
- Conducted or managed hundreds of health and safety or EHS audits to evaluate compliance with applicable regulations and conformance with company requirements, industry standards, and best practices.
- Performed EHS management systems assessments and developed EHS risk management strategies, programs and procedures for OHSAS 18001, ISO 14001, ANSI Z-10, OSHA Voluntary Protection Program, and other customized specifications.
- Conducted dozens of technical investigations and hazard, exposure or risk assessments for chemical, biological, radiological, and physical hazards, and developed and/or presented over 200 training courses on a range of EHS topics and emergency preparedness and response.
- Served as the EHS lead for a global division of a Fortune 200 corporation. Directed EHS compliance and management for two research and development facilities, serving as the Chemical Hygiene Officer, Radiation Safety Officer, and Institutional Biosafety Committee EHS member.

## Education

- University at Albany College of Nanoscale Sciences and Engineering (SUNY Polytechnic) Doctor of Philosophy, Nanobioscience (2014)
- University of Oregon Master of Science, Environmental Studies (1999)
- Clarkson University Bachelor of Science, Industrial Hygiene & Environmental Toxicology (1993)

## **Professional Certifications and Associations**

- American Board of Industrial Hygiene (ABIH), Certification in the Comprehensive Practice of Industrial Hygiene (CIH) (2000-Present)
- American Industrial Hygiene Association (AIHA)
  - AIHA Eastern Upstate New York (EUNY) section, Board member (2016-Present)
    - AIHA EUNY President (2017); President-Elect (2016)
  - AIHA Nanotechnology Working Group (NTWG), Executive Board member (2013-Present)
    - AIHA NTWG Past Chair (2016-2017); Chair (2015-2016); Vice Chair (2014-2015); Secretary (2013-2014); and Secretary-Elect (2013)



• U.S. Technical Advisory Group to ISO (International Organization for Standardization) Technical Committee 229 Nanotechnologies, Working Group 3 Health, Safety and Environmental Aspects of Nanotechnologies (TAG member, 2014-2015)

#### **Relevant Experience**

Selected examples include:

- Conducted a gap assessment for a new business of a Fortune 10 corporation to identify applicable EHS regulatory and corporate requirements, the current site status, and recommended corrective and preventive actions. Provided technical and management oversight for staff developing and implementing programs, conducting exposure assessments, providing training and other onsite EHS support.
- For a biopharmaceutical start-up, conducted a gap assessment to identify applicable EHS regulations and developed a program matrix outlining key tasks, frequency, and responsibility. Worked with the company to develop and implement EHS programs and procedures, provide training, and conduct periodic inspections and program reviews.
- Completed an EHS assessment for a consumer product manufacturer that included identification of key program requirements and development of a prioritized action plan to address identified gaps.
- For the global research and development campus of a leading pharmaceuticals corporation, managed a 3-year project that included developing occupational health and safety management systems procedures and updating compliance programs for successful registration under the OHSAS 18001 management systems specification. Also worked with the client on their environmental management system certified under ISO 14001, and developed and updated management system procedures and tools for an integrated EHS management system (EHSMS).
- For a large manufacturer, currently managing a project to develop training modules for three sites on over a dozen health and safety topics including respirators, PPE, ergonomics, hoists and cranes, electrical safety, lockout/tagout, fall protection, and other topics.
- For a manufacturing site of a Fortune 200 firm, managed a multi-year project to: conduct qualitative chemical risk assessments for over two dozen processes, develop an industrial hygiene sampling plan, conduct baseline and surveillance monitoring, and determine the surveillance sampling frequency using a Bayesian Decision Analysis software and corporate guidelines.

## **Professional Highlights**

## COLDEN CORPORATION

As a Senior Scientist and Senior Project Manager, Dr. Shepard provides multidisciplinary consulting for clients in numerous industries including pharmaceutical, semiconductor, consumer



hygiene and nutritional products, chemicals and specialty materials, and others, as well as for colleges and universities and hospitals.

### WOODARD & CURRAN

Served as a Vice President and Senior Project Manager of the privately held engineering, sciences and operations company. Led the consulting practice for health and safety, including proposal development, marketing, and business planning, and managing clients, projects, and health and safety scientists/engineers.

#### SUNY RESEARCH FOUNDATION

Conducted research on the health and safety aspects of engineered nanoparticles used in the semiconductor industry.

#### **CONSULTANT/SOLE PROPRIETOR**

Provided EHS consulting services to biotechnology and pharmaceutical clients and to MIT.

#### **MONSANTO/CEREON GENOMICS**

Directed all EHS aspects for two genomics research and development facilities, established and provided oversight for seven EHS teams composed of over fifty personnel, and served as the Chemical Hygiene Officer, Radiation Safety Officer and Institutional Biosafety Committee (IBC) member. Worked with local and federal agencies on issues related to recombinant DNA, radioactive materials, hazardous waste, wastewater, noise, and emergency response planning.

Served as the HSE lead for the Genomics global division and as a member of the Committee responsible for developing policies and providing updates to the Monsanto Board.

#### **UNIVERSITY OF OREGON**

Developed the curriculum and served as the instructor for a 400-level class on Environmental Health. Served as a graduate research and teaching fellow.

Conducted research on the impact of ISO 14001 registrations in the U.S. electronics industry under a National Science Foundation (NSF) Design for Environment grant (MV Russo).

#### ARTHUR D. LITTLE

Provided health and safety consulting including program development, training, industrial hygiene and safety assessments, and audits. Developed audit protocols, conducted audits for industrial hygiene, occupational health and employee safety programs, and reviewed corporate audit program implementation.