

Sunil D. Lakhiani, Ph.D., P.E.
Managing Engineer

Professional Profile

Dr. Sunil Lakhiani is a Managing Engineer in Exponent's Human Factors practice. Dr. Lakhiani uses his knowledge in human factors and risk perception to evaluate and investigate human errors and accident causation associated with consumer products, heavy machinery, and industrial tools and operations. He has specialized knowledge and experience in the design and evaluation of warnings and instructions for a wide array of products including sporting goods, household and industrial chemicals, industrial equipment, and consumer products. Dr. Lakhiani also uses the Consumer Product Safety Commission's (CPSC's) NEISS database to assess hazards and risks associated with consumer products and various common activities. He has conducted safety audits of worksites through inspections and injury-data analysis.

Dr. Lakhiani uses his background in chemical engineering and industrial engineering to investigate human factors and warnings issues relating to confined-space entry, use of chemical products, and design of chemical vessels. He also has experience in evaluating compliance with Occupational Safety and Health Act (OSHA) and the Federal Hazardous Substances Act (FHSA).

Prior to joining Exponent, Dr. Lakhiani completed his Ph.D. in Industrial and Systems Engineering, with a focus in human factors and safety in the chemical industry. As part of his dissertation, Dr. Lakhiani developed hypothetical scenarios, realistic to the chemical industry, and used them in understanding relationships between human perception and response related to near-miss reporting behavior.

Academic Credentials and Professional Honors

Ph.D., Industrial and Systems Engineering, University of Wisconsin, Madison, 2007
M.S., Industrial and Systems Engineering, University of Wisconsin, Madison, 2003
B.E., Chemical Engineering, University of Mumbai, India, 2001

Polygon Engineering Council's Outstanding Teaching Assistant in Industrial Engineering,
2005–2006

Licenses and Registrations

Registered Professional Engineer, Wisconsin, #40741-6

Certified Qualified Individual for Fall Protection; OSHA – Qualified Individual for General Industry Standards (OSHA 511); Certified in DOT HM-126F Hazardous Materials Transportation

Languages

Hindi, Sindhi (speak only)

Publications

Sala JB, Nichols EA, Muhammad R, Lakhiani SD, Rauschenberger R, Wood CT. Government, warnings, safety information: A comparison of inter-agency regulations and guidance. In: *Advances in Human Factors, Ergonomics, and Safety in Manufacturing and Service Industries*. Karwowski W, Salvendy G (eds), pp. 1047–1056, CRC Press, 2010.

Lakhiani SD. Effect of confidentiality of reporting system on employee perception and their willingness to report near-miss. American Institute of Chemical Engineers, 2010 Spring National Meeting, 44th Annual Loss Prevention Symposium, San Antonio, TX, March 22–24, 2010.

Krauss D, Arndt S, Lakhiani SD, Khan FS. Additional considerations when applying the “Safety Engineering Hierarchy” in industrial work settings. Proceedings, 13th Annual International Conference on Industrial Engineering: Theory, Applications and Practice, Las Vegas, NV, 2008.

Lakhiani SD. Effect of confidentiality of reporting system and severity of potential consequences of near-miss events in chemical industry on causal attribution and employees’ willingness to report: A scenario-based study. Ph.D. Dissertation, University of Wisconsin-Madison, 2007.

Lakhiani SD, Khan FS, Smith MJ. Electronic performance monitoring: Effect on productivity, employee health, and well-being. Proceedings, National Conference on HWWE-2004, pp. 28–32, Mumbai, India, 2004.

Khan FS, Lakhiani SD, Smith MJ. A macroergonomic look at call center workers in India. Proceedings, National Conference on HWWE-2004, pp. 17–21, Mumbai, India, 2004.

Professional Affiliations

- American Society of Safety Engineers (member)
- Human Factors and Ergonomics Society (member)
- Society of Chemical Hazard Communication (member)