



Exponent[®]
Engineering & Scientific Consulting

Tim Myers, Ph.D., P.E., CFEI

Office Director and Principal Engineer | Thermal Sciences

Natick

+1-508-652-8572 | tmyers@exponent.com

Professional Profile

Dr. Myers applies chemical engineering principles to analyze industrial processes and to investigate and prevent incidents involving chemical releases, fires, and explosions. His investigations include incidents involving chemical, agricultural and industrial facilities, the warehousing and transport of hazardous chemicals, commercial and residential structures, vehicles, batteries and energy storage systems, consumer products, and burn injuries.

Dr. Myers has investigated incidents involving a wide range of combustion equipment including candles, torches, heaters, ovens, furnaces, and boilers. His work in these investigations has included determining origin and cause, experimentally measuring properties of materials, numerical modeling, and evaluation of products and facilities with current and historical regulations, codes, and guidelines. Dr. Myers has investigated fires and explosions on multiple continents.

Dr. Myers has conducted engineering analysis and experimental testing involving chemical reactions, heat and mass transfer, fluid mechanics, thermodynamics, fires, and dust and gas explosions. He has testified as an expert witness in state and federal courts.

Dr. Myers is a member of several NFPA technical committees responsible for standards related to the prevention and mitigation of fires and explosions. He performs dust hazard analyses (DHAs), risk analyses and assists clients in developing mitigation methods. Dr. Myers evaluates the design and efficacy of fire and explosion protection systems including foams (AFFF), inerting, venting, suppression, isolation, and flame arrestors. He is a member of the ASTM committee responsible for the development of standards to determine the ignition and flammability properties of gases, vapors, and dusts clouds and oversees testing in Exponent's Combustible Dust Testing Laboratory.

Dr. Myers has a particular interest in the stability of chemicals and chemical mixtures and their reactivity hazards. He has investigated incidents involving self-heating or thermal runaway of chemicals and the unintentional reactions of incompatible chemicals. Dr. Myers has developed test methods for assessing self-heating and the hazards of reactive chemicals. He has analyzed the effects of specific chemicals on the integrity of materials including composites, metals, paper, plastics, and wood.

Prior to joining Exponent, Dr. Myers was a Graduate Student Researcher at the University of California, Berkeley and Lawrence Berkeley National Laboratory. He has also worked in process engineering and process control in the pulp and paper industry.

Academic Credentials & Professional Honors

Ph.D., Chemical Engineering, University of California, Berkeley, 1999

B.S., Forest Resource - Pulp and Paper Science, University of Washington, 1993

Frank Lees Medal, Safety & Loss Prevention Special Interest Group, Institution of Chemical Engineers (ICChemE), 2017

Golden Key National Honor Society, University of Washington

Xi Sigma Pi Forestry Honor Society, University of Washington

University of Washington Kyosti V. Sarkanen Scholarship, 1992

Technical Association of the Pulp and Paper Industry (TAPPI) Engineering Division Scholarship, 1992

TAPPI Paper and Board Manufacture Division Scholarship, 1992

Licenses and Certifications

Professional Engineer Chemical, California, #6329

Professional Engineer, Georgia, #PE036505

Professional Engineer Chemical, Maine, #PE12065

Professional Engineer, Ohio, #PE.74253

40-Hour Hazardous Waste Operation and Emergency Response Certification (HAZWOPER)

Certified Fire and Explosion Investigator (CFEI)

Confined Space Entry (29 CFR 1910.146)

Fire Investigation 1A (Cause and Origin), California Office of State Fire Marshal

Professional Affiliations

American Institute of Chemical Engineers – AIChE (Senior Member, Member of Safety & Health Division)

AIChE Boston Section – Ichthyologists (Member)

American Society for Testing and Materials — ASTM

- Member of Committee E06 on Performance of Buildings
- Vice-Chairman 2012-2018 and Member of Committee E27 on Hazard Potential of Chemicals
- Member Committee F15 on Consumer Products
- Member Committee F27 on Snow and Water Sports

American Society of Heating, Refrigerating and Air-Conditioning Engineers – ASHRAE (Member)

IAAI, Massachusetts Chapter – MAIAAI (Member)

National Association of Fire Investigators – NAFI (Member, CFEI)

National Fire Protection Association

- *Principal Member: Committee on Foam responsible for NFPA 11 Standard for Low-, Medium-, and High-Expansion Foam*
- *Principal Member: Committee on Liquefied Petroleum Gases responsible for NFPA 58 Liquefied Petroleum Gas Code*
- *Chair: Committee on Agricultural Dusts responsible for NFPA 61 Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities*
- *Alternate Member: Committee on Explosion Protection Systems responsible for NFPA 67 Guide on Explosion Protection for Gaseous Mixtures in Pipe Systems, NFPA 68 Standard on Explosion Protection by Deflagration Venting, and NFPA 69 Standard on Explosion Prevention Systems*
- *Principal Member: Committee on Combustible Metals and Metal Dusts responsible for NFPA 484 Standard for Combustible Metals*
- *Principal Member Committee on Electrical Equipment in Chemical Atmospheres responsible for NFPA 496 Standard for Purged and Pressurized Enclosures for Electrical Equipment, NFPA 497 Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas, and NFPA 499 Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas*
- *Principal Member: Committee on Fundamentals of Combustible Dusts responsible for NFPA 652 Standard on Combustible Dusts*
- *Principal Member Committee on Wood and Cellulosic Materials Processing responsible for NFPA 664 Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities*
- *Nonvoting Member: Technical Correlating Committee on Combustible Dusts responsible for NFPA 61, 91, 484, 652, 654, 655, 660 and 664.*

Technical Association of the Pulp and Paper Industry – TAPPI (Member)

Publications

Book Chapters

Ibarreta AF, Myers TJ. Explosion prevention and protection. Chapter 17-8 of the 21st Edition of the Fire Protection Handbook, NFPA, 2023.

Myers TJ. Storage and handling of solid fuels. Chapter 7-1 of the 21st Edition of the Fire Protection Handbook, NFPA, 2023.

Publications and Conference Proceedings

Wechsung A, Dimitrakopoulos G, Hashad K, Myers T. Promise and potential limitations of power-to-heat technologies. Proceedings, TAPPICon, Minneapolis, MN, 2025.

Yen M, Ibarreta AF, Hashad K, Myers, TJ. Methods for the analysis of gas explosions. Proceedings, International Symposium on Fire Investigation Science and Technology (ISFI), Orlando, FL, 2024.

Myers, TJ, Watson HAJ, Saba T. Determination of the source of fuel gases involved in explosions. Proceedings, ISFI, Orlando, FL, 2024.

Wechsung A, Orella M, Kersey K, Myers, TJ. The energy transition – how will it impact fire investigation. Proceedings, ISFI, Orlando, FL, 2024.

Wechsung A, Barry M, Dimitrakopoulos G, Spray R, Colella F, Myers, TJ. Lithium-ion battery fire investigation fundamentals. Proceedings, ISFI, Orlando, FL, 2024.

Wechsung A, Yen M, Ibarreta AF, Myers TJ, Kytomaa HK. Venting of hydrogen explosions. Proceedings, AIChE Spring Meeting and 19th Global Congress on Process Safety, Houston, TX, 2023.

Colella F, Mendoza S, Myers TJ, Cook N, Quantifying Lithium-Ion Multi-cell risks, Marine Professional, Issue 1, 2023.

Colella F, Mendoza S, Barry M, Kossolapov A, Spray R, Myers TJ. Energy Release Quantification for Li-Ion Battery Failures, In Compliance Magazine, Feature Article, November 2022

Stern MC, Favero CVB, Ibarreta AF, Colella F, Morrison DR, Myers TJ. Flame arrestor failures in industrial equipment and consumer products. Proceedings, AIChE Spring Meeting and 17th Global Congress on Process Safety, Virtual, 2021.

Ibarreta AF, Myers TJ. Got dust?: Performing a dust hazard analysis (DHA). Proceedings, AIChE Spring Meeting and 17th Global Congress on Process Safety, Virtual, 2021.

Myers TJ, O'Hern SC, Stern MC, Ibarreta AF. Best practices for performing a combustible dust hazard analysis. Leader, VPPPA, 8(1), Winter, 2021.

Myers TJ, Yen M, Mendoza S, Ibarreta AF. Mitigating the hazards of battery systems. Chemical Engineering Progress, May 2020

Ibarreta AF, Colella F, Wolf MI, Yen, M, O'Hern SC, Myers TJ. Modeling of explosion venting fireballs. Proceedings, Mary K O'Connor Process Safety Symposium, College Station, TX, 2019.

Ibarreta AF, Colella F, Wolf MI, Vickery J, O'Hern SC, Myers TJ. Measuring leak flow rates in fire and explosion investigations. Proceedings, ISFI, Itasca, IL 2018.

Ibarreta AF, Colella F, Wolf MI, O'Hern SC, Myers TJ. Modeling of explosion venting fireballs. Proceedings, 13th International Symposium on Hazards, Prevention, and Mitigation of Industrial Explosions (ISHPMIE), Kansas City, MO, 2018.

O'Hern SC, Stern MC, Vickery J, Anderson DM, Ibarreta AF, Myers TJ. Impact of dust-fueled flash fires on personal protective equipment fabrics. Proceedings 13th ISHPMIE, Kansas City, MO, 2018.

Stern MC, Bishop J, Ibarreta AF, Ogle RA, Myers TJ. Electrostatic hazards during pneumatic conveying of combustible dusts in flexible hoses. Proceedings, 14th Global Congress on Process Safety, American Institute of Chemical Engineers Spring Meeting, Orlando, FL, 2018.

Ibarreta AF, Myers TJ, O'Hern SC, Stern M. Portable vacuums for AM/PM operations: The good, the bad and the ugly. Proceedings POWDERMET 2017, International Conference on Powder Metallurgy & Particulate Materials, Las Vegas, NV 2017.

O'Hern SC, Stern MC, Anderson DM, Ibarreta AF, Myers T J. Analysis of combustible dust flash fires on personal protective equipment fabrics. Proceedings, Hazards 27, Institution of Chemical Engineers, Birmingham, UK, 2017. Awarded Frank Lees Medal for the most meritorious publication on the topic of safety and loss prevention in an IChemE publication.

Stern MC, O'Hern SC, Ibarreta AF, Ogle RA, Myers TJ. Ignitability of combustible dust fueled flash fires

with industrial ignition sources. Proceedings, 13th Global Congress on Process Safety, AIChE Spring Meeting, San Antonio, TX, 2017.

Moberg MA, Mandell ML, Kiel J, Page C, Myers TJ, Van Sluytman, J. 3D printing/component parts/raw materials. In: 3D Printing of Manufactured Goods: An Updated Analysis, Reed Smith White Paper, Second Edition, 2016.

Stern MC, Rosen J, Ogle RA, Myers TJ. Quantification of the thermal hazard from metallic and organic dust flash fires. Journal of Loss Prevention in the Process Industries 2016, 44:528-537.

Ibarreta AF, Myers TJ. Mitigating fire and explosion hazards of powdered metals. Metal Powder Report 2016; doi:10.1016/j.mprp.2016.01.073.

Myers TJ, Ibarreta AF, O'Hern SC. Mitigating fire and explosion hazards of metal powders: update on changing consensus standards, Proceedings POWDERMET 2016, International Conference on Powder Metallurgy & Particulate Materials, Boston, MA 2016.

Myers TJ, Ibarreta AF, Stern MC, O'Hern SC, Page CD. Combustible dust hazards in additive manufacturing operations, Proceedings POWDERMET 2016, International Conference on Powder Metallurgy & Particulate Materials, Boston, MA 2016.

Stern MC, Budiansky N, Somandepalli V, Reza A, Myers TJ. Accidents during turnarounds, cleanings, and other infrequent operations. Proceedings, 12th Global Congress on Process Safety, AIChE Spring Meeting, Houston, TX, 2016.

Ibarreta AF, Stern MC, Myers TJ. Fire and Explosion Hazards in Enclosed Powder Conveyors. Powder & Bulk Solids 2016, 34(6):26-30.

Myers TJ, Kytömaa, HK, Uncovering patterns to improve process safety. Exponent Oil & Gas Insight, Volume 3, 2015.

Stern MC, Rosen JS, Ibarreta AF, Myers TJ, Ogle RA. Quantification of the thermal hazard of metallic and organic dust flash fires. Proceedings Mary K O'Connor Process Safety Symposium, College Station, TX, 2015.

Ibarreta AF, Myers TJ. Fire and explosion mitigation strategies for metal powders. Proceedings, Proceedings, POWDERMET 2015, International Conference on Powder Metallurgy & Particulate Materials, San Diego, CA, 2015.

Ibarreta AF, Myers TJ, Marr KC, Garner SW. On the use of laminar burning velocities in process safety. Proceedings, 49th Loss Prevention Symposium, AIChE Engineers Spring Meeting, Austin, TX, 2015.

Stern MC, Rosen JS, Ibarreta AF, Myers TJ, Ogle RA. Unconfined deflagration testing for the assessment of combustible dust flash fire hazards. Proceedings, 49th Loss Prevention Symposium, AIChE Spring Meeting, Austin, TX, 2015.

Stern MC, Ibarreta AF, Myers TJ. Assessment and mitigation of combustible dust hazards in the plastics industry. Proceedings, 30th International Conference of the Polymer Processing Society, Cleveland, OH, 2014 and AIP Conference Proceedings 1664, 180003, 2015.

Myers TJ, Ibarreta AF, Marr KC. Prescriptive versus performance-based mitigation of combustible dust hazards. Proceedings, 48th Loss Prevention Symposium, AIChE Spring Meeting, New Orleans, LA, 2014.

Myers TJ, Ibarreta AF. Tutorial on combustible dust. Process Safety Progress 2013; 32(3):298-306.

Myers TJ, Ibarreta AF, Bucher JM, Marr KC. Assessing the hazard of marginally explosible dusts.

Proceedings, 47th Loss Prevention Symposium, AIChE Spring Meeting, San Antonio, TX, 2013.

Ashcraft RW, Ibarreta AW, Myers TJ. Preferential gas flow around a snow-covered pipe: empirical evidence and modeling. The National Fire Investigator, National Association of Fire Investigators, Fall/Winter 2012.

Bucher JM, Ford WP, Ibarreta AF, Marr KC, Myers TJ. Testing of marginally explosible dusts: evaluation of overdriving and realistic ignition sources in process facilities. Proceedings, Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2012.

Ellison AD, Somandepalli V, Myers TJ. Investigation of carbon monoxide incidents. Proceedings, ISFI, Hyattsville, MD, 2012.

Ibarreta AF, Myers TJ, Bucher JM, Marr K. Explosion severity: propane versus natural gas. Proceedings, ISFI, Hyattsville, MD, 2012.

Ibarreta AF, Myers TJ. Tutorial on combustible dust. Proceedings, AIChE Spring National Meeting, Houston, TX, 2012.

Ashcraft RW, Ibarreta AF, Myers TJ. Leaking gas from a snow-covered pipe: Empirical evidence and modeling of preferential flow paths. Journal of Fire Protection Engineering 2011; 21:57-79.

Ashcraft RW, Ibarreta AF, Myers TJ. Preferential gas flow around a snow-covered pipe: Empirical evidence and modeling. Proceedings, ISFI, Hyattsville, MD, 2010.

Kytömaa HK, Myers TJ, Ibarreta AF, Ponchaut N. Using real time process models to detect loss of containment and mitigate hazards. Proceedings, 12th Process Plant Safety Symposium, AIChE Spring National Meeting, San Antonio, TX, 2010.

Myers TJ, Kytömaa HK, Ibarreta AF, Ponchaut N. Analyzing historic process data to identify near misses and warning signs: Examples from the Buncefield incident. Proceedings, 6th Global Congress on Process Safety, AIChE Spring National Meeting, San Antonio, TX, 2010.

Myers TJ, Ibarreta AF. Investigation of the Jahn Foundry and CTA Acoustics dust explosions: Similarities and differences. Journal of Loss Prevention in the Process Industries 2009; 22:740-745.

Myers TJ. Dust explosions. Georgia Defense Lawyer 2009; VI(II):12, 27, 28.

Myers TJ, Ibarreta AF. Case study of a hydrogen explosion in an electrical panel. Fire Safety Magazine 2009 Spring; 12-19.

Myers TJ, Ibarreta AF, Ashcraft RW. Dust explosion prevention: regulations, standards, and mitigation techniques. Proceedings, 43rd Annual Loss Prevention Symposium, AIChE Spring National Meeting, Tampa, FL, 2009.

Myers TJ. Reducing aluminum dust explosion hazards: Case study of dust inerting in an aluminum buffing operation. Journal of Hazard Materials 2008; 159(1):72-80.

Myers TJ, Long RT, Gavelli F, Kytömaa HK. The use of smoke detector sequence of activation in determining the area of origin of a fire: investigation of the FedEx DC-10 fire. Proceedings, ISFI, Cincinnati, OH, 2008.

Myers TJ, White KC, Xu T. Did a dust explosion occur? Microscopic and thermogravimetric techniques to determine if dust participated in an explosion event. Proceedings, ISFI, Cincinnati, OH, 2008 and Proceedings, Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2008.

Myers TJ, Hinze PC, Kytömaa HK. Fire and explosion in an explosives conditioning bunker. Proceedings, 42nd Annual Loss Prevention Symposium, AIChE Spring National Meeting, New Orleans, LA, 2008.

Myers TJ, Ibarreta AF. Case study of a hydrogen explosion in an electrical panel. Proceedings, 42nd Annual Loss Prevention Symposium, AIChE Spring National Meeting, New Orleans, LA, 2008.

Myers TJ, Ibarreta AF. Investigation of the Jahn Foundry and CTA acoustics dust explosions: Similarities and differences. Proceedings, Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2007.

Rangwala AS, Myers TJ, Ibarreta AF. Measurements of the non-dimensional Frank-Kamenetskii number using a standard dust layer ignition testing apparatus. Proceedings, 5th International Seminar on Fire and Explosion Hazards, Edinburgh, UK, 2007.

Myers TJ, Kytömaa HK, Smith TR. Environmental stress-corrosion cracking of fiberglass: Lessons learned from failures in the chemical industry. Journal of Hazardous Materials 2007; 142(3):695-704.

Myers TJ. Reducing aluminum dust explosion hazards: Case study of dust inerting in an aluminum buffing operation. Proceedings, Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2006.

Myers TJ. Concurrent investigations with the CSB — The perspective of a private party investigator. Proceedings, ISFI, Cincinnati, OH, 2006.

Myers TJ, McWhorter T. Making a reactive chemical system inherently safer at a small company: Case study of the CDG Gas:Solid™ chlorine dioxide generator. Proceedings, Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2005.

Myers TJ, Kytömaa HK, Smith TR. Environmental stress-corrosion cracking of fiberglass: Lessons learned from failures at small chemical facilities. Proceedings, Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2005.

Myers TJ. Dust explosions in the pulp and paper industry. Proceedings, TAPPI Engineering, Pulping, and Environmental Conference, Philadelphia, PA, 2005.

Myers TJ, Kytömaa HK, Martin RJ. Fires and explosions in vapor control systems: A lessons learned anthology. Process Safety Progress 2003; 22(4):195-199.

Martin RJ, Myers TJ, Hinze PC, Kytömaa HK. Test your incinerator knowledge. Chemical Engineering Progress 2003; 99(2):36-39.

Martin RJ, Hinze PC, Myers TJ, Kytömaa HK. Thermal oxidizing systems. Hydrocarbon Processing 2002; 81(11):79-80.

Myers TJ, Kytömaa HK, Martin RJ. Fires and explosions in vapor control systems: A lessons learned anthology. Proceedings, 36th Annual Loss Prevention Symposium, AIChE Spring National Meeting, New Orleans, LA, 2002.

Myers TJ, Radke CJ. Transient foam displacement in the presence of residual oil: Experiment and simulation using a population-balance model. Industrial & Engineering Chemistry Research 2000; 39:2725-2741.

Myers TJ. The role of residual oil in the mechanistic simulation of foam flow in porous media: Experiment and simulation with the population-balance method. Ph.D. Dissertation, University of California, Berkeley, 1999.

Presentations

Myers TJ, Sarnie R, Combustible Dust: Science, Standards & Mitigation Strategies, American Society of Safety Professionals (ASSP) Greater Boston Chapter Meeting, Canton, MA, 2025.

Moreno L, Dastidar A, Reason J, Cloney C, Myers TJ. NFPA 660 panel update, Powder & Bulk Solids Conference & Exhibition, Rosemont, IL, 2025.

Hashad K, Wechsung A, Dimitrakopoulos F, Myers TJ. Promise and potential limitations of power-to-heat technologies. TAPPICon, Minneapolis, MN, 2025.

Yen M, Ibarreta AF, Hashad K, Myers TJ. Methods for the analysis of gas explosions. ISFI, Orlando, FL, 2024.

Myers, TJ, Watson HAJ, Saba T. Determination of the source of fuel gases involved in explosions. ISFI, Orlando, FL, 2024.

Wechsung A, Orella M, Kersey K, Myers, TJ. The energy transition – how will it impact fire investigation. ISFI, Orlando, FL, 2024.

Wechsung A, Barry M, Dimitrakopoulos G, Spray R, Colella F, Myers, TJ. Lithium-ion battery fire investigation fundamentals. ISFI, Orlando, FL, 2024.

Wechsung A, Sulmonetti T, Myers T, Kytomaa HK. Safely implementing an explosive hydrogen market: applying lessons learned to expanding hydrogen usage. AIChE Spring Meeting & 20th Global Congress on Process Safety, New Orleans, LA, 2024.

Wechsung A, Dimitrakopoulos G, Hashad K, Myers TJ. Are power-to-heat technologies ready to transition to your facility?, AIChE Spring Meeting & 20th Global Congress on Process Safety, New Orleans, LA, 2024.

Myers TJ, Lessons learned from large-scale dust explosion incident investigation, Global Dust Safety Conference, Virtual, 2024.

Cloney C, Dastidar A, Kreitman K, Myers T, Krbec J, Current status of NFPA 660 development, Global Dust Safety Conference, Virtual, 2024.

Wechsung A, Reding N, Ibarreta AF, Myers TJ. Navigating Unfamiliar Territory: US Hydrogen Safety Regulations and European Standards. 2023 Center for Hydrogen Safety Europe Conference, Rotterdam, Netherlands, 2023.

Myers TJ. NFPA 660 and dust hazard analysis. Convery '23, Omaha, NE, 2023.

Cloney C, Dastidar A, Myers TJ, Reason J, Kreitman K, New unified NFPA 660 combustible dust standard – separating fact from fiction. Powder & Bulk Solids Conference and Exhibition, Rosemont, IL, 2023.

Wechsung A, Yen M, Ibarreta AF, Myers TJ, Kytomaa HK. Venting of hydrogen explosions. Poster presentation, AIChE Spring Meeting and 19th Global Congress on Process Safety, Houston, TX, 2023.

White CC, Streifel BC, Wechsung A, Myers TJ. Understanding the pathways for residual PFAS during fluoropolymer processing. ACS Spring Meeting, San Diego, CA, 2022.

Ibarreta AF, Myers TJ. Analysis of industrial explosions. Oakland County Association of Arson and Fire Investigators Inc.(QCAAFII) Quarterly Training, Virtual, 2021.

Ibarreta AF, Myers TJ. Vapor cloud explosion (VCE) basics. Tutorial presentation at AIChE Spring Meeting and 17th Global Congress on Process Safety, Virtual, 2021.

Stern MC, Favero CVB, Ibarreta AF, Colella F, Morrison DR, Myers TJ. Flame arrestor failures in industrial equipment and consumer products. AIChE Spring Meeting and 17th Global Congress on Process Safety, Virtual, 2021.

Ibarreta AF, Myers TJ. Got Dust?: Performing a Dust Hazard Analysis (DHA). AIChE Spring Meeting and 17th Global Congress on Process Safety, Virtual, 2021.

Barry MT, Vickery J, Spray RL, Myers TJ. Investigating the effects of testing conditions on gas evolution in lithium-ion battery abuse tests. Battery and Energy Storage Conference, AIChE, Virtual, 2020

Barry MT, Vickery J, Spray R, Myers TJ. Understanding how testing conditions affect hazard quantification in lithium-ion battery abuse tests. ESA Energy Storage Annual Conference & Expo, Virtual, 2020.

Yen M, Ibarreta AF, Mendoza S, Myers TJ. Using process safety principles to mitigate the hazards of battery energy storage systems. AIChE Spring Meeting and 16th Global Congress on Process Safety, Virtual, 2020.

Myers TJ, Watson, H. Process hazard analyses (PHAs) and process safety management (PSM). Massachusetts Institute of Technology (MIT), 10.490 Integrated Chemical Engineering, Cambridge, MA, 2019.

Ibarreta AF, Colella F, Wolf MI, Yen M, O'Hern SC, Myers TJ. Modeling of explosion venting fireballs. Mary K O'Connor Process Safety Symposium, College Station, TX, 2019.

Favero CVB, Vickery J, O'Hern SC, Stern MC, Ibarreta AF, Myers TJ. Exposure of fabrics used in personal protective equipment to combustible dust flash fires. Mary K O'Connor Process Safety Symposium, College Station, TX, 2019.

Myers TJ. Mitigating fire and explosion hazards of battery energy storage systems. Battery and Energy Storage Workshop, AIChE, New York, NY, 2019.

Myers TJ, O'Hern SC. Best practices for performing a combustible dust hazard analysis (DHA). Safety+ National Symposium, Voluntary Protection Program Participants' Association (VPPPA), New Orleans, LA, 2019.

Myers TJ. Hot topics in fire and explosion investigation: batteries, computed tomography (CT) and 3D models. NJDA 53rd Annual Convention, Brewster, MA 2019.

Ibarreta AF, Colella F, Wolf MI, Vickery J, O'Hern SC, Myers TJ. Measuring leak flow rates in fire and explosion investigations. ISFI, Itasca, IL 2018.

Myers TJ, Ibarreta AF, Colella F, Wolf MI, O'Hern SC. Modeling of explosion venting fireballs. 13th International Symposium on Hazards, Prevention, and Mitigation of Industrial Explosions (ISHPMIE), Kansas City, MO, 2018.

O'Hern SC, Stern MC, Vickery J, Anderson DM, Ibarreta AF, Myers TJ. Impact of dust-fueled flash fires on personal protective equipment fabrics. 13th ISHPMIE, Kansas City, MO, 2018.

Myers TJ, Ibarreta AF. Explosion protection in industrial settings. Worcester Polytechnic Institute (WPI), Department of Fire Protection Engineering, Worcester, MA, 2018.

Stern MC, Bishop J, Ibarreta AF, Ogle RA, Myers TJ. Electrostatic hazards during pneumatic conveying

of combustible dusts in flexible hoses. 14th Global Congress on Process Safety, AIChE Spring Meeting, Orlando, FL, 2018.

O'Hern SC, Stern MC, Vickery J, Anderson DM, Ibarreta AF, Myers TJ. Analysis of combustible dust flash fires on personal protective equipment fabrics. 14th Global Congress on Process Safety, AIChE Spring Meeting, Orlando, FL, 2018.

Mandell M, Myers TJ, Page C. 3D Printing: Component Parts/Raw Materials Product Liability & Health Risks, Webinar, Reed Smith, 2017.

Ibarreta AF, Myers TJ, O'Hern SC, Stern MC. Portable vacuums for AM/PM operations: The good, the bad and the ugly. POWDERMET 2017, International Conference on Powder Metallurgy & Particulate Materials, Las Vegas, NV 2017.

O'Hern SC, Stern MC, Anderson DM, Ibarreta AF, Myers TJ. Analysis of combustible dust flash fires on personal protective equipment fabrics. Proceedings, Hazards 27, Institution of Chemical Engineers, Birmingham, UK, 2017.

Stern MC, O'Hern SC, Ibarreta AF, Ogle RA, Myers TJ. Ignitability of combustible dust fueled flash fires with industrial ignition sources. 13th Global Congress on Process Safety, AIChE Spring Meeting, San Antonio, TX, 2017.

Myers TJ. Dust explosion hazards, ASM Boston and ASM Central Massachusetts Joint Meeting, Framingham, MA, 2017.

Myers TJ. Dust explosions, Webinar, AIChE and Associação Brasileira de Engenharia Química (ABEQ), 2016.

Bershad T, Kreitman K, Hart P, Myers TJ, Runyon M, Reason J, Drake M. NFPA combustible dust standards - an update, NFPA Conference and Expo, Las Vegas, NV, 2016.

Myers TJ, Ibarreta AF, O'Hern SC. Mitigating fire and explosion hazards of metal powders: update on changing consensus standards, Proceedings POWDERMET 2016, International Conference on Powder Metallurgy & Particulate Materials, Boston, MA, 2016.

Myers TJ, Ibarreta AF, Stern MC, O'Hern SC, Page CD. Combustible dust hazards in additive manufacturing operations, Proceedings POWDERMET 2016, International Conference on Powder Metallurgy & Particulate Materials, Boston, MA, 2016.

Buehler CS, Myers TJ, Kytömaa HK. Using data analytics to improve process safety, 12th Global Congress on Process Safety, AIChE Spring Meeting, Houston, TX, 2016.

Stern MC, Budiansky N, Somandepalli V, Reza A, Myers TJ. Accidents during turnarounds, cleanings, and other infrequent operations. 12th Global Congress on Process Safety, AIChE Spring Meeting, Houston, TX, 2016.

Stern MC, Myers TJ. Mitigating safety and regulatory risk in a chemical project effort. AIChE, 2015 Annual Meeting, Salt Lake City, UT, 2015.

Stern MC, Rosen JS, Ibarreta AF, Myers TJ, Ogle RA. Quantification of the thermal hazard of metallic and organic dust flash fires. Mary K O'Connor Process Safety Symposium, College Station, TX, October 27, 2015.

Myers TJ. The Buncefield explosion. Boston Section of the AIChE, Natick, MA 2015.

Myers TJ, Ibarreta AF. Combustible dust programs: Hazard assessment and compliance. Region II

Voluntary Protection Program Participants' Association (VPPPA) Annual Conference, Atlantic City, NJ, 2015.

Marr KC, Myers TJ. Fire and explosion hazards of batteries. Energy Storage Association (ESA) 25th Annual Conference and Expo, Dallas, TX, 2015.

Ibarreta AF, Myers TJ. Fire and explosion mitigation strategies for metal powders. POWDERMET 2015, International Conference on Powder Metallurgy & Particulate Materials, San Diego, CA, 2015.

Ibarreta AF, Myers TJ, Marr KC, Garner SW. On the use of laminar burning velocities in process safety. 49th Loss Prevention Symposium, AIChE Spring Meeting, Austin, TX, 2015.

Stern MC, Rosen, JS, Ibarreta AF, Myers TJ, Ogle RA. Unconfined deflagration testing for the assessment of combustible dust flash fire hazards. 49th Loss Prevention Symposium, AIChE Spring Meeting, Austin, TX, 2015.

Ibarreta AF, Myers TJ. Over-reliance on automated controls and alarms: A case study. New England Area Chapters of American Society of Safety Engineers (ASSE), Warwick, RI, December 2014.

Stern MC, Ibarreta AF, Myers TJ. Assessment and mitigation of combustible dust hazards in the plastics industry. 30th International Conference of the Polymer Processing Society, Cleveland, OH, 2014.

Myers TJ, Ibarreta AF, Marr KC. Prescriptive versus performance-based mitigation of combustible dust hazards. 48th Loss Prevention Symposium, AIChE Spring Meeting, New Orleans, LA, 2014.

Myers TJ, Ibarreta AF, Bucher JM, Marr KC. Assessing the hazard of marginally explosible dusts. 47th Loss Prevention Symposium, AIChE Spring Meeting, San Antonio, TX, 2013.

Bucher JM, Ibarreta AF, Marr KC, Myers TJ. Testing of marginally explosible dusts: Evaluation of overdriving and realistic ignition sources in process facilities. Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2012.

Ellison AD, Somandepalli V, Myers TJ. Investigation of carbon monoxide incidents. ISFI, Hyattsville, MD, 2012.

Ibarreta AF, Myers TJ, Bucher JM, Marr K. Explosion severity: propane versus natural gas. ISFI, Hyattsville, MD, 2012.

Myers TJ. Pellet mill safety: Assessing risk and implementing safeguards for accident prevention. Pellet Fuel Institute Annual Conference, Mashantucket, CT, 2012.

Myers TJ, Ibarreta AF. The role of engineering analysis in explosion investigations. Worcester Polytechnic Institute (WPI), Department of Fire Protection Engineering, Worcester, MA, 2012.

Ibarreta AF, Myers TJ. Tutorial on combustible dusts. AIChE Spring National Meeting, Houston, TX, 2012.

Bucher JM, Ibarreta AF, Myers, TJ. Combustible dusts: hazard recognition and abatement. Greater Boston Chapter American Society of Safety Engineers (ASSE), Hopkinton, MA, 2011.

Myers TJ. How a small company responded to incidents and made a reactive chemical system inherently safer. AIChE Northeast Regional Conference, New York, NY, 2011.

Ibarreta AF, Myers TJ. Fires and explosions involving fuel gas systems. First Party Claims Conference (FPCC), Providence-Warwick, RI, 2010.

Ibarreta AF, Ashcraft RW, Myers, TJ. Preferential gas flow around a snow-covered pipe: Empirical

evidence and modeling. ISFI, Hyattsville, MD, 2010.

Myers TJ. OSHA regulation updates on powder coating safety — Explosion prevention and fire suppression systems. National Association of Pipe Coating Applicators Summer Workshop, Houston, TX, 2010.

Myers TJ, Ibarreta AF. Investigation of explosions using engineering analysis. Worcester Polytechnic Institute (WPI), Department of Fire Protection Engineering, Worcester, MA, 2010.

Kytömaa HK, Myers TJ, Ibarreta AF, Ponchaut NF. Using real time process models to detect loss of containment and mitigate hazards. 12th Process Plant Safety Symposium, AIChE Spring National Meeting, San Antonio, TX, 2010.

Myers TJ, Kytömaa HK, Ibarreta AF, Ponchaut NF. Analyzing historic process data to identify near misses and warning signs: Examples from the Buncefield incident. 6th Global Congress on Process Safety, AIChE Spring National Meeting, San Antonio, TX, 2010.

Myers TJ, Ibarreta AF. Water leaks, oil spills and gas explosions - When good pipes go bad. Cozen O'Connor, Philadelphia, PA, 2010.

Kytömaa HK, Myers TJ, Ibarreta AF, Ponchaut NF. Anatomy of the failures that led to the Buncefield explosion and fire. Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2009.

Myers TJ. Dust explosions. Webinar, AIChE, 2009.

Myers TJ, Ibarreta AF, Ashcraft RW. Dust explosion prevention: regulations, standards, and mitigation techniques. 43rd Annual Loss Prevention Symposium, AIChE Spring National Meeting, Tampa, FL, 2009.

Myers TJ, Ibarreta AF. Using fire protection engineering to investigate explosions. Worcester Polytechnic Institute (WPI), Department of Fire Protection Engineering, Worcester, MA, 2009.

Myers TJ. Dust explosion mitigation: OSHA regulations and relevant standards. National Association of Pipe Coating Applicators Summer Workshop, Houston, TX, 2008.

Myers TJ, Long RT, Gavelli F, Kytömaa HK. The use of smoke detector sequence of activation in determining the area of origin of a fire: investigation of the FedEx DC-10 fire. ISFI, Cincinnati, OH, 2008.

Myers TJ, White KC, Xu T. Did a dust explosion occur? Microscopic and thermogravimetric techniques to determine if dust participated in an explosion event. ISFI, Cincinnati, OH, 2008 and Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2008.

Myers TJ, Hinze, PC, Kytömaa, HK. Fire and explosion in an explosives conditioning bunker. 42nd Annual Loss Prevention Symposium, AIChE Spring National Meeting, New Orleans, LA, 2008.

Myers TJ, Ibarreta AF. Case study of a hydrogen explosion in an electrical panel. 42nd Annual Loss Prevention Symposium, AIChE Spring National Meeting, New Orleans, LA, 2008.

Myers TJ, Ibarreta AF. Explosion investigation: Reverse-engineering a blast scene. Worcester Polytechnic Institute (WPI), Department of Fire Protection Engineering, Worcester, MA, 2007.

Myers TJ. Dust explosions — Identifying and mitigating the hazard using consensus standards. American Society of Safety Engineers (ASSE) Professional Development Conference, New England Area, Worcester, MA, 2007.

Ramirez J, Myers TJ, Long RT. Identificación de los Peligros de Explosiones de Polvo Usando las Normas de la NFPA. XXII Exposición, SegurShow 07, Caracas, Venezuela, 2007.

Myers TJ, Ibarreta AF. Investigation of the Jahn Foundry and CTA acoustics dust explosions: Similarities and differences. Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2007.

Myers TJ, Long RT. Identification of dust explosion hazards and mitigation using NFPA Standards. National Fire Protection Association World Safety Congress and Exposition, Boston, MA, 2007.

Myers TJ, Wu N. Material flammability and its contribution to fire growth. The Hartford Financial Services Group, Hartford, CT, 2007.

Rangwala AS, Myers TJ, Ibarreta AF. Measurements of the non-dimensional Frank-Kamenetskii number using a standard dust layer ignition testing apparatus. 5th International Seminar on Fire and Explosion Hazards, Edinburgh, UK, 2007.

Myers TJ. Reducing aluminum dust explosion hazards: Case study of dust inerting in an aluminum buffing operation. Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2006.

Myers TJ. Concurrent investigations with the CSB — The perspective of a private party investigator. ISFI, Cincinnati, OH, 2006.

Myers TJ, McWhorter T. Making a reactive chemical system inherently safer at a small company: Case study of the CDG Gas:Solid™ chlorine dioxide generator. Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2005.

Myers TJ, Kytömaa HK, Smith TR. Environmental stress-corrosion cracking of fiberglass: Lessons learned from failures at small chemical facilities. Mary Kay O'Connor Process Safety Center Symposium, College Station, TX, 2005.

Myers TJ. Dust explosions in the pulp and paper industry. Technical Association of the Pulp and Paper Industry Engineering, Pulping, and Environmental Conference, Philadelphia, PA, 2005.

Myers TJ. Scientific investigation of fires and explosions. Pennsylvania Defense Institute Annual Meeting, Gettysburg, PA, 2004.

Myers TJ, Kytömaa HK, Martin RJ. Fires and explosions in vapor control systems: A lessons learned anthology. 36th Annual Loss Prevention Symposium, AIChE Spring National Meeting, New Orleans, LA, 2002.

Radke CJ, Myers TJ. Modeling foam flow in porous media in the presence of residual oil. Oil Contractor Review Program Meeting, National Petroleum Technology Office, Denver, CO, 2000.

Myers TJ, Radke CJ. The bridging coefficient as an antifoaming criterion: Thermodynamic basis and film-rupture mechanisms. AIChE Annual Meeting, Dallas, TX, 1999.

Myers TJ, Radke CJ. Transient foam displacement in the presence of residual oil: Experiment and simulation using a population-balance model. Society of Petroleum Engineers Annual Technical Conference and Exhibition, Houston, TX, 1999.

Myers TJ, Radke CJ. The role of residual oil in the mechanistic simulation of foam flow in porous media: Theory and experiment. 68th Annual Western Regional Meeting of the Society of Petroleum Engineers, Bakersfield, CA, 1998.

Myers TJ, Radke CJ. Mechanism of rupture of foam lamellae moving across a wetting discontinuity. AIChE Annual Meeting, Los Angeles, CA, 1997.

Myers, TJ, Kaminsky RA, Radke CJ. Water films, asphaltenes, and wettability alteration. AIChE Annual

Meeting, Los Angeles, CA, 1997.

Myers, TJ, Kaminsky RA, Radke CJ. Asphaltene deposition and wettability alteration. Western Regional Meeting of the Society of Petroleum Engineers, Long Beach, CA, 1997.

Radke CJ, Myers TJ, Cohen DG, Patzek TW. Reservoir simulation of foam displacement with a mechanistic trapping function. Department of Energy Petroleum Symposium, Houston, TX, 1997.