

**Celina Mikolajczak**  
**Manager of Cell Quality and Battery Technology**  
**Tesla Motors**

Celina Mikolajczak joined the Tesla Motors Battery Technology Group as the Manager for Cell Quality in April 2012. In that role, Ms. Mikolajczak has been working to refine and formalize a cell quality control program, address a variety of cell quality issues, work with cell suppliers to assess and approve cell production lines in Asia, assist with cell safety testing, address environmental health and safety issues related to lithium-ion cells and battery packs, address various regulatory issues related to lithium-ion cells, determine internal best practices for handling and storage of li-ion cells, and revise and maintain Tesla's emergency response guides for battery packs. Prior to joining Tesla Motors, Ms. Mikolajczak was a Senior Managing Engineer at Exponent, an Engineering Consulting Firm. While at Exponent, Ms. Mikolajczak developed an expertise in lithium-ion battery failure modes, safety testing, and fire behavior. She has published extensively on these subjects, including a 2011 report for the National Fire Protection Association (NFPA) entitled "Lithium-Ion Batteries Hazard and Use Assessment." This report is available for download on the NFPA website:

<http://www.nfpa.org/assets/files/pdf/research/rflithiumionbatterieshazard.pdf>.

In 2011 Ms. Mikolajczak was a recipient of the National Aeronautics and Space Administration (NASA) Group Achievement Award as a participant of the EMU Long-Life Battery Team for outstanding contributions of the Long-Life Battery Team in developing the first successful Lithium-ion battery for the Extravehicular Mobility.

**Dr. Daniel H. Doughty, Ph.D.**  
**President and Founder**  
**Battery Safety Consulting Inc.**

Daniel H. Doughty is president and founder of Battery Safety Consulting Inc. that focuses on providing expert and independent consulting services including failure analysis, test method development, interpretation of test results, expert witness, and forensic consulting. Previously, he was Vice President for Product Safety at Sion Power, where he directed all programs related to safety of high energy, rechargeable lithium sulfur batteries. His work contributed to understanding and improving safety and abuse tolerance of batteries from a fundamental and practical level. Dr. Doughty identified failure mechanisms by developing new test methods that allowed characterization of failure modes of Li-S cells and batteries when exposed to abusive conditions. Mr. Doughty held several management positions within the Sandia Power Sources Technology Group from 1992 to 2006, including managing the Advanced Power Source Research and Development Department. That group had responsibility for developing advanced power sources – electrochemical cells and batteries that maximize energy and power for defense and commercial applications. He participated with his staff in development of leading edge electrochemistry (work concentrated on Li Ion chemistry, but spanned all lithium chemistries) as well as advanced battery materials and cell design. He wrote the Battery Abuse Test Standard that was accepted by U.S. Advanced Battery Consortium (USABC) for safety evaluation of hybrid vehicle batteries. His research interests included materials development for advanced electrochemical applications, life prediction of cells and batteries, as well as investigation of battery failure mechanisms that lead to poor abuse tolerance. He served as a battery technology expert witness for the U.S. Dept. of Justice in the BP Deepwater Horizon case, and was the Chair of SAE J2464 Committee for the Society of Automotive Engineers Recommend Test Procedure J2464, "*Electric and Hybrid Electric Vehicle Rechargeable Energy Storage System (RESS) Safety and Abuse Testing*," November 2009. He holds five patents, has authored more than 90 publications, and is the co-editor of four technical proceedings volumes on energy storage and conversion (i.e., battery, capacitor and fuel cell) materials.

**Duane A. Pfund**  
**International Standards Coordinator**  
**Pipeline and Hazardous Materials Safety Administration**  
**U.S. Department of Transportation**

Mr. Duane A. Pfund is the International Standards Coordinator within the Office of Hazardous Materials Safety of the Pipeline and Hazardous Materials Safety Administration (PHMSA). He is responsible for leading PHMSA's representation at international dangerous goods transport forums including the United Nations Sub-Committee of Experts on the Transport of Dangerous Goods, the International Civil Aviation Organization Dangerous Goods Panel, the International Maritime Organization Dangerous Goods, Solid Cargos, and Containers Sub-Committee, and the UN Economic Commission for Europe's Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods. He has the lead role in the development of dangerous goods transport regulations that align the US Hazardous Materials Regulations (HMR) with international standards. Within PHMSA he also served for 3 years as the Acting Director of the Engineering and Research Division leading the execution of the Office's mission for chemical and explosive classification, engineering evaluation, radiological support, and research. Mr. Pfund has been involved in developing safety regulations for the transportation of hazardous materials for over 23 years. Prior to coming to PHMSA, he was a leading hazardous materials packaging, transportation and customs expert with the US Air Force where he was responsible for the Department of Defense policy for the air transport of hazardous materials world-wide. He has held the position of Vice-Chairman of the UN Sub-Committee of Experts on the Transport of Dangerous Goods.

**George Kerchner**  
**Executive Director**  
**PRBA – The Rechargeable Battery Association**

George Kerchner serves as the Executive Director of PRBA – The Rechargeable Battery Association. He represents PRBA at domestic and international transportation forums such as the United Nations Subcommittee of Experts on the Transport of Dangerous Goods, International Civil Aviation Organization (ICAO) Dangerous Goods Panel and International Maritime Organization (IMO) Subcommittee on Dangerous Goods, Solid Cargoes and Containers. Mr. Kerchner has extensive experience with the U.S. and international hazardous materials (dangerous goods) transportation regulations. He also has experience in the environmental policy and regulatory fields and focuses on issues affecting the rechargeable battery industry as well as the portable electronics and electric vehicle industries. He conducts hazardous materials training programs for shippers of lithium ion batteries and lithium metal batteries, portable electronic equipment and electric vehicles. In his role at PRBA, Mr. Kerchner is also responsible for the following:

- Attends domestic and international transportation forums on hazardous materials regulations and drafts proposed changes to international hazardous materials regulations affecting the battery, electronics and electric vehicle industries.
- Monitors domestic and international legislative and regulatory developments affecting various segments of the rechargeable battery and electronics industries, including transportation and battery collection and recycling developments in the U.S., Europe, Asia and Latin America.
- Conducts hazardous materials training programs throughout the U.S.
- Secures Competent Authority Approvals and Special Permits from the U.S. Department of Transportation and foreign transportation agencies for shippers of hazardous materials.

Mr. Kerchner holds an M.A. from The Johns Hopkins University and a B.A. from the University of Maryland. He is a member of the Board of Directors for the Dangerous Goods Advisory Council (DGAC).

**Glen V. Bowling**  
**Vice President of Sales**  
**Saft Specialty Battery Group**

Glen Bowling has 34 years of experience in program management, sales, marketing and general management starting in the A-10 System Program Office of the USAF then working at Honeywell in avionics as a Marketing Representative, Aerojet Ordnance Tennessee as Small Caliber and Special Projects Program Manager and Operations Manager, Saft Lithium Battery Division as Sales Manager, Director and finally Vice President of Sales, Evercel as Vice President of Sales and Marketing, Saft Space and Defense Division as Sales Director and then General Manager and now the Saft Specialty Battery Group Vice President of Sales. Mr. Bowling is currently leading a worldwide team executing the commercial activity for the \$350+ million Saft Specialty Battery Group. He has been granted two US patents; USP 6,057,670: A smart connector for a rechargeable battery and USP 6,270,916: A complete discharge device for a lithium battery. Mr. Bowling is a Life Member of the Navy League, and active in Association of the US Army, the National Defense Industry Association and PRBA, the Portable Rechargeable Battery Association. Mr. Bowling holds an MBA in Finance from Wright State University and a BS in Business Administration from the University of Florida

**Janet McLaughlin**  
**Deputy Director, Hazardous Materials Safety Program**  
**Federal Aviation Administration**

Janet McLaughlin is currently the Deputy Director of the Federal Aviation Administration's Hazardous Materials (dangerous goods) Safety Program (HMSP). This includes administering and enforcing the Federal Aviation Regulations and Hazardous Material Regulations through the development and implementation of a national HMSP. Ms. McLaughlin serves as the focal point for aviation related hazardous material research, policy making, rulemaking and international panels. In her career, she has over 30 years of experience in the hazardous material transportation environment. This includes the Department of Defense as well as the Federal Aviation Administration. The experience with the DOD includes instructing Hazardous Material Transportation and Packaging Engineering on behalf of Aberdeen Proving Ground and the Army Logistic Center Management College at Ft. Lee. As an internationally recognized expert in dangerous goods and highly regarded by her international counterparts, Ms. McLaughlin has been active in the ICAO Dangerous Goods Panel's work since 2001. Also under ICAO auspices, she has served in an advisory capacity for foreign civil aviation authorities throughout the world, and has helped create training programs for member states on four continents and served as one of only three certified ICAO/Universal Safety Oversight Audit Program auditors for Annex 18 assessing the adequacy of safety oversight of the safe transportation of dangerous goods by ICAO Contracting States. Ms. McLaughlin recently has been leading the integration of SMS into the FAA HMSP with the Flight Operations Programs of FAA.

**Jeff Dermott**  
**Director of New Product Development**  
**EaglePicher Technologies**

Jeff Dermott has been Director of New Product Development for EaglePicher Technologies since the beginning of 2010. In his 28 year career at EaglePicher Jeff has held a variety of technical and management positions dealing with battery and cell development. He has experience with the design and production of multiple chemistries ranging from small, primary lithium systems to large, secondary nickel based satellite batteries. He has authored and coauthored numerous papers on battery development for space and terrestrial applications. In his current role at EaglePicher Jeff is responsible for the technical oversight of new products that are being developed to fulfill a variety of energy storage needs. These products include large scale battery farms for Grid Energy Storage Systems (GESS), lithium ion batteries for aircraft applications, large format lithium ion cells for space applications and electronic Battery Management Systems (BMS) that protect and manage the cells within a battery. Jeff holds a B.S. in Mechanical Engineering from the University of Missouri – Rolla.

**Dr. Judith Jeevarajan, Ph.D.**  
**Group Lead for Battery Safety and Advanced Technology**  
**NASA**

Dr. Judith Jeevarajan has worked on-site at NASA-Johnson Space Center since 1998. She is currently the Group Lead for Battery Safety and Advanced Technology at NASA-JSC. Before becoming a civil servant at NASA in 2003, she worked for Lockheed Martin Space Operations. She has a M.S. in Chemistry from the University of Notre Dame ('91) and she graduated with a Ph.D. in Chemistry (Electrochemistry) from the University of Alabama in Tuscaloosa in 1995. Dr. Jeevarajan worked for a small business company in College Station, TX for a year immediately after completion of graduate work. Following this, she worked for a year as a post-doctoral fellow at Texas A&M University on NASA projects. She has more than 15 years of battery experience with her main focus being li-ion cell and battery research. Dr. Jeevarajan represents the battery group at all the NASA safety panels, which involves working with the International Partners as well as the commercial vehicles for crew and cargo. Dr. Jeevarajan also leads the advanced battery technology work at Johnson Space Center with a special focus on the safety improvements. Dr. Jeevarajan's work also includes testing the state-of-the-art cell and batteries for use in space as well as to understand the general issues observed with cell and battery designs of all chemistries. Dr. Jeevarajan serves in the Technical Working Group for standards organizations such as Underwriter's Laboratories and IEC/ANSI and is currently leading an effort for NASA under AIAA to write a space safety standard for battery systems. She has written two Chapters, one on battery safety that was published in 2009 and the second one currently with the publishers. Dr. Jeevarajan has more than 65 presentations at conferences and has won numerous NASA awards the most recent of them being the NASA Exceptional Service award.

**Keith Wilson**  
**Manager, Technical Projects, Ground Vehicle Standards**  
**SAE International**

Keith Wilson is Manager of Technical Projects for SAE International. He coordinates projects and standards activities related to advanced vehicle technologies and he is involved in developing innovative business strategies surrounding vehicle safety systems, electro-mobility, chassis systems and materials/processes. Keith's role at SAE International also includes business development, ground vehicle

standards support and management of cooperative research programs. Keith is also responsible for the development of technical project strategies and technical proposals. Prior to joining SAE International, Keith has served in automotive engineering and technical leadership positions, including Engineering Group Manager, General Motors Automotive Safety Center. Keith managed engineering/technical groups responsible for supporting product litigation activities and product defect investigations. In addition, Keith served as Manager, Vehicle Crash Test Operations, for GM Safety and Restraints Center. Keith earned a Master of Science in Business Administration from Central Michigan University, a Bachelor Degree in Business Management from Cleary University and a Degree in Applied Science from Oakland College.

**Kenneth R. Willette**  
**Division Manager, Public Fire Protection Division**  
**National Fire Protection Association**

Kenneth R. Willette serves as Division Manager of the Public Fire Protection Division of the National Fire Protection Association and is responsible for managing a technical staff that supports over 90 Standards focused on the needs of the fire service and emergency responders. He has 35 years of diverse experience in the fire service and emergency preparedness planning, serving as an airfield and structural firefighter, shift commander and Chief of Department and Emergency Manager for two communities. He earned a BS in Fire Protection Administration from Empire State University, Stony Brook, NY and is a Past President of the Fire Chiefs Association of Massachusetts.

**Kevin Cook**  
**High Energy Chemical Storage Safety Office (HECSSO)**  
**Naval Sea Systems Command (NAVSEA)**

Kevin Cook has spent 30 years as a Navy civilian in numerous marine engineering and management assignments. Early work involved direct waterfront engineering support at Norfolk Naval Shipyard in the Propulsion Machinery area. In 1987 Mr. Cook moved to the Naval Sea Systems Command to join the newly formed Submarine Safety (SUBSAFE) Office. In this position he was responsible for SUBSAFE Manual requirements and P-9290 (Deep Submergence Systems) certification. He also managed the associated audit and quality assurance programs. In 1999 he was assigned as integration manager for the USS Jimmy Carter (SSN-23) conversion program. This position required bringing many diverse non-Navy systems onto a submarine platform and resolving all the attendant technical issues. In 2007 Mr. Cook was assigned as Technical Director of NAVSEA PMS394 (Deep Submergence Systems Acquisition Office). Finally, in 2010 Mr. Cook was selected to establish the High Energy Chemical Storage Safety Office (HECSSO) under the Chief Engineer of the Navy. This new safety program is charged with safe platform integration of lithium batteries, fuel cells, and other high density energy systems on ships and submersibles. Mr. Cook has a BS degree in Mechanical Engineering and a MS degree in Mechanics.

**Kevin Leary**  
**International Transportation Specialist**  
**Pipeline and Hazardous Materials Safety Administration**  
**U.S. Department of Transportation**

Mr. Leary is an international transportation specialist with the Pipeline Hazardous Materials Safety Administration (PHMSA) within the U.S. Department of Transportation. Mr. Leary's responsibilities include representing PHMSA at various domestic and international meetings, developing position papers, incorporating changes made at the international level into domestic dangerous goods regulations and providing the regulated industry with verbal and written guidance on dangerous goods regulations. While with PHMSA, Mr. Leary has led several successful rulemaking teams and is currently the team lead for PHMSA's lithium battery rulemaking. Prior to his federal service, Mr. Leary served in the hazardous materials information center where he provided immediate assistance to the public on all aspects of the federal hazardous materials regulations. Mr. Leary holds a B.S. in Environmental Science with a focus on economics and policy from The Pennsylvania State University.

**Laurie Florence**  
**Principal Engineer**  
**UL LLC**

Laurie Florence has a Bachelor's of Science degree from the University of Illinois and joined UL in 1990 as an engineer in their engineering services department, evaluating products for safety certification. Laurie has worked in numerous categories in her years at UL including a variety of motor operated appliances, laboratory and information technology equipment, and gas and oil equipment. Since 2003, Laurie has been the Principal Engineer for the following categories: Batteries, Fuel Cells, Hydrogen Generators and Capacitors. As the Principal Engineer, Laurie has responsibility for technical input, determining technical competency criteria for UL staff and supporting UL's certification programs for her categories of responsibility. Laurie is also UL's representative on the following domestic and international committees and organizations: UL 1642/2054 (until 2010), 1973/1989, 2580/2271, 810/810A, 2267, Standard Technical Panels (STPs); Revisions projects for IEEE 1625 and 1725; CTIA cell phone battery ad hoc committee; NEMA C18 battery committees; SAE TEVVBC1(battery safety); ISO TC 22/SC21 US TAG for electric vehicles and WG 3 for EV batteries; CSA Standards Fuel Cell Technical Committee; US TAG and various working groups or maintenance teams for IEC SC 21A (rechargeable batteries) including serving as the convener for WG 5 (lithium ion cells and batteries for industrial applications), IEC TC 35 (primary batteries), IEC TC 31 HWG 37 (hazardous locations batteries), IEC TC 120 (energy storage systems) and 105(fuel cells); US TAG and working groups for ISO TC 197 (hydrogen technical committee); and NFPA Technical Committee for Electric Generating Plants (ECG-AAA) and NFPA 2 Hydrogen Technical committee (HYD-AAA). Laurie is also participating on the UN EVS-GTR informal working group and had participated on the UN lithium battery transport T6 task group.

**Margaret T. Jenny**  
**President**  
**RTCA, Inc.**

Margaret Jenny is the President of RTCA, Inc., a private, not-for-profit corporation dedicated to the development of consensus-based recommendations regarding aviation issues. RTCA functions as a federal advisory committee. From 2001-2008, Ms. Jenny served as Chief Executive Officer of MJF Strategies, LLC., an aviation consulting firm. Prior to forming MJF Strategies in 2001, Ms. Jenny was Vice President of Corporate Business Development at ARINC. Ms. Jenny's previous positions include: Director of Airline Business and Operations Analysis for US Airways (1996-1998) and Technical Director at The MITRE Corporation (1983-1996). Ms. Jenny holds an AB degree in Sociology from Indiana University (Bloomington, IN) and an MS degree in Computer Science from American University

(Washington, DC). She has served on numerous boards and advisory committees including the National Academy of Sciences, the National Transportation Research Board Committee, and the FAA's Research Engineering and Development Advisory Committee. She has received numerous awards, including the Aviation Week and Space Technology Laurel (1997).

**Patrick Davis**  
**Director, Vehicle Technologies Office**  
**U. S. Department of Energy**

Patrick Davis is the Director of the Vehicle Technologies Office at the U.S. Department of Energy. The Vehicle Technologies Office manages research funding for hybrid drivetrains, advanced batteries, lightweight materials, advanced combustion and fuels, vehicle systems integration, and Clean Cities deployment activities. He is responsible for three major government/industry partnerships, the U.S. DRIVE Partnership, the 21<sup>st</sup> Century Truck Partnership, and the National Clean Fleets Partnership. Patrick also serves on the Board of Directors of the American National Standards Institute. Patrick has 32 years of public service, is a Chemical Engineer, and has devoted virtually his entire career to the development of vehicle, alternative fuel, and electrochemical technologies.

**Dr. M. Stanley Whittingham, Ph.D.**  
**Professor of Chemistry and Materials Science & Engineering**  
**Director of the Materials Science Program and Institute for Materials Research**  
**State University of New York at Binghamton and Stony Brook**

Stan Whittingham is a distinguished professor of chemistry and materials science & engineering and director of the Materials Science Program and Institute for Materials Research at the State University of New York at Binghamton. He received his BA and D Phil degrees in chemistry from Oxford University. In 1968, he joined the Materials Science Department at Stanford University as a postdoctoral research associate to study fast-ion transport in solids and in 1971 won the Young Author Award of the Electrochemical Society for his work on the solid electrolyte beta-alumina. In 1972, he joined Exxon Research and Engineering Company to initiate a program in alternative energy production and storage. He discovered there the role of intercalation in battery reactions, which resulted in the first commercial lithium rechargeable batteries (full details in the book "Bottled Lightning" by Seth Fletcher, 2011). After 16 years in industry, he joined the Binghamton campus of the State University of New York as a professor of chemistry to initiate an academic program in materials chemistry. His recent work focuses on the synthesis and characterization of novel microporous and nano-oxides and phosphates for possible electrochemical and sensor applications. He was principal editor of the *Journal Solid State Ionics* for 20 years. He won the Battery Research Award of the Electrochemical Society in 2002, and was elected a Fellow of the Electrochemical Society in 2004. He was elected a Fellow of the Materials Research Society in 2013. In addition he was awarded a JSPS Fellowship in the Physics Department of the University of Tokyo in 1993. In 2007, he co-chaired the battery section of the US DOE Workshop on Energy Storage, and presented its recommendations at the National Meetings of the American Chemical Society and the Materials Research Society as well as in the April 2008 issue of the Materials Research Society Bulletin. The last is now a text book with Cambridge University Press. In 2010 he received the NERM award of the American Chemical Society for his contributions to chemistry, and in 2012 he received the Yeager Award of the International Battery Association for his lifetime contributions to battery research. He is presently also Director of the Northeastern Center for Chemical Energy Storage, a DOE Energy Frontier Research Center, based at Stony Brook University. He is Vice-Chair, Board of Directors of the New York Battery and Energy Storage Technology Consortium (NYBEST).

**Stephen Summers**  
**Chief, Structures and Restraints Research Division**  
**NHTSA**

Stephen Summers has been working in NHTSA Crashworthiness Research since 1990. Over the last 23 years, Mr. Summers has worked extensively regarding occupant crash safety and automotive restraints. His focus areas have been in rollover and vehicle crash compatibility. The safety of alternative fuel vehicles is supported by the Structures and Restraints Research division, which has several active research efforts. Mr. Summers has a BS and MS from the University of Maryland.

**Vincent Visco**  
**Senior Vice-President of Business Strategy and Development**  
**Quallion LLC**

Vincent Visco, Senior VP of Business Strategy and Development of Quallion LLC assumes control over all marketing and sales, program management, and government affairs. He manages all business operations, including business development, strategic ventures and developing key partnerships throughout the various industries. Over his tenure as VP of Military/Aerospace, Quallion has seen a greater than 20% yearly revenue growth in the military/aerospace sector. Prior to 2006, Mr. Visco worked in the project office for NASA-JPL. He holds a Master's degree from the University of Southern California.

**Dr. Yet-Ming Chiang, Ph.D.**  
**Kyocera Professor, Department of Materials Science & Engineering**  
**Massachusetts Institute of Technology**

Yet-Ming Chiang is Kyocera Professor in the Department of Materials Science and Engineering at Massachusetts Institute of Technology (MIT). He holds S.B. and Sc.D. degrees from MIT, where he has been a faculty member since 1984. He is a member of the U.S. National Academy of Engineering, and a Fellow of the American Ceramic Society and the Materials Research Society. His research focuses primarily on advanced materials and their role in clean energy. In several instances discoveries from his laboratory have been spun out for commercialization, including high power nanoscale olivine cathodes for Li-ion batteries which are today in commercial use in power tools, electric transportation (HEVs, PHEVs and EVs, with >400 million road miles driven), and grid scale storage (90 MW installed worldwide). Mr. Chiang serves on numerous government and academic advisory committees and study panels, and is a Trustee of the Boston Museum of Science.