



GROUND VEHICLE STANDARDS NEWSLETTER

Creating harmonized standards solutions.
Moving the on- and off-road vehicle industry forward.

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SAE STANDARDS DISCUSSED AT ELECTRIC VEHICLE FORUM IN TAIWAN

Jack Pokrzywa, SAE International's Global Ground Vehicle Standards Manager, discussed SAE's current work in standards development at the Automotive Research & Testing Center (ARTC) "Electric Vehicles Verification Technologies Forum" in Taipei in October.

Pokrzywa spoke about new standards being developed in the areas of connected vehicles, electrified vehicles, and hydrogen vehicles. The forum's attendees also received an overview of driver distraction, cyber-security, and automated vehicle efforts undertaken by SAE standards developers.

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From left to right at the Electric Vehicles Verification Technologies Forum are Liv Huang, Manager, ARTC; Guibin Liu, Professor, China's Automotive Technology and Research Center (CATARC); Laurie Florence, Principle Engineer, Batteries, Fuel Cells & Capacitors, UL; Tony Tsui, Assistant Vice President, ARTC; Jack Pokrzywa, Manager, SAE International Global Ground Vehicle Standards; and Doris Lee, Engineer, ARTC.

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In 2010, SAE International and ARTC agreed to conduct harmonized technical efforts in electric vehicle and plug-in hybrid electric vehicle standards development.

ARTC's goal is to develop innovation technologies to satisfy

industry needs in Taiwan. The center provides a broad range of testing service for completed vehicles and components, and conducts tests which are accepted for national approvals.

SAE ESTABLISHES CHINA AUTOMOTIVE STANDARDS ADVISORY COUNCIL

SAE International has established a China Automotive Standards Advisory Council (CASAC) to advise the Ground Vehicle Motor Vehicle Council and SAE staff on automotive standards needs in China.

The council follows on the heels of an early 2013 agreement between SAE and the China Automotive Technical and Research Center (CATARC), which establishes on-going communication between the two organizations.

Two CASAC meetings have been held in Shanghai in 2013. Members currently include: Jin Gang, Chief Engineer, EE Systems, BAIC; Albrecht Pfeiffer, Manager, NEV Charging Systems, BMW; Frank Heinen, General Manager, Electric Vehicle & Hybrid Technology, BOSCH; Bob Galyen, CTO, CATL; Zhou Rong, Chief Engineer, Auto Standardization Research Institute, CATARC; Gary Mullen, Manager, Body Interior, Ford; David Reeck, China Manager, Electrification Strategy & Infrastructure, GM; Michael



Miller, HES Product Group Director, Ricardo; Shui Fang, Director, NEV R&D, Volvo; and Fu Zhenxing, Director, Powertrain Systems, SAIC. Additional Chinese OEMs are being invited to join.

The council's current primary focus area is safety, particularly in the emerging areas of vehicle electrification.

SAE PARTICIPATES IN TRANSATLANTIC TRADE DISCUSSION

SAE International was one of several U.S. standards development organizations that participated in a U.S.-German Standards Panel conducted by the American National Standards Institute (ANSI) and the German Institute for Standardization (DIN) on October 15th in Washington, D.C.

The workshop brought together more than 50 participants, including representatives from the German industry and government, as well as U.S. stakeholders. Standards and conformance play an important role in trade relationships between the U.S. and Germany.

SAE: A GLOBAL PARTNER IN STANDARDS DEVELOPMENT

In addition to the maintenance and development of its family of technical standards, SAE International is also an active partner with other standards development organizations, government agencies, and regulatory bodies to support the newest, most robust, and comprehensive standards products for a changing global marketplace.

- US Department of Transportation
- Society of Automotive Engineers of Japan (JSAE)
- German Electrical and Electronic Manufacturers Association (ZVEI)
- US Federal Highway Administration
- China Automotive Technology & Research Center (CATARC)
- National Highway Traffic Safety Administration
- Korean Agency for Technology and Standards (KATS)
- US Department of Energy
- Japan Automobile Research Institute (JARI)
- US Environmental Protection Agency
- Brazilian National Standards Organization (ABNT)
- American National Standards Institute (ANSI)
- Automotive Electronics Council (AEC)
- International Organization for Standardization (ISO); US representative



SAE, NEMA SIGN AGREEMENT

SAE International and the National Electrical Manufacturers Association (NEMA) have signed an agreement concerning collaborative activities related to smart grid vehicle

electrification. The agreement sets frameworks for more effective information exchange in areas where standards, still under development, impact the efforts of both organizations.

SAE J1772 EV/PHEV COMBO COUPLER STANDARD USED IN EV-GRID ENERGY MANAGEMENT PROJECT

Adapted from an article previously published in *SAE Vehicle Electrification*

Southwest Research Institute (SwRI) announced in September that it deployed the first electric-vehicle aggregation system using SAE International's J1772 standard ("SAE Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charge Coupler") for direct current (DC) fast charging. The system, part of the Smart Power Infrastructure Demonstration for Energy Reliability and Security (SPIDERS) Phase II program, is controlling five fast-charge stations at the Fort Carson Army Base in Colorado Springs, Colorado.

In August, the system passed integration and acceptance testing, successfully aggregating electric vehicles from two vehicle manufacturers equipped with SAE-compliant bidirectional charging interfaces.

"The SwRI aggregation system manages a fleet of electric vehicles, controlling both vehicle charging and microgrid needs and supporting vehicle schedules, as well as supplementing the base's energy supply," said Sean Mitchem, project manager and a principal analyst in SwRI's Automation and Data Systems Division.

Batteries in the EVs serve as cushion against fluctuations in the grid, creating more stability and resiliency while improving the grid's ability to accommodate renewable energy from a solar energy array at the base.

"Using this new technology, electric vehicles can use or store this green energy more efficiently than previously was possible," Mitchem said.



Boulder Electric Vehicle is one of the companies supplying EVs for the V2G project at Fort Carson Army Base in Colorado.

NHTSA OFFICIAL ADDRESSES SAE MOTOR VEHICLE COUNCIL MEETING

Nathaniel Beuse, Associate Administrator for Vehicle Safety Research, National Highway Traffic Administration (NHTSA), provided an overview of NHTSA research priorities for light vehicles to the SAE Motor Vehicle Council on August 23.

His presentation featured a review of NHTSA's near term priorities, and new areas of focus for vehicle safety research.

Near term priorities discussed included: advanced braking systems which build on forward collision warning systems; vehicle to vehicle communications; new crash dummies, advanced automatic crash notification; the NHTSA Driver Distraction Research Program; and development of a new frontal crash test.

New areas of focus that he discussed included: older occupants; electronic control systems; cyber security; driver information systems; and autonomous vehicles.

Mr. Beuse noted that NHTSA is active in a number of SAE's standards committees, praising SAE's on-going work on automated vehicle definitions and functional safety. He underscored the need for standard activities in cyber security, which has become one of the top priorities for numerous industries. He also pointed to the topics of human-machine interface in the vehicle cockpit, crash warning interfaces, and connected vehicles as areas for which new standards might be beneficial.

NEW RECOMMENDED PRACTICE FOR GRAPHICS-BASED MANUFACTURING SYMBOLS PUBLISHED

SAE International has developed a recommended practice for manufacturing symbols that could save industry millions of dollars annually in translation costs.

"J2892: Graphics-Based Service Information," was created to develop icons – as well as animation and illustration conventions – for use in graphics-based documentation of adjustment, assembly, remove and replace, and theory of operation procedures and stories, utilizing a minimum of human natural language text.

The symbols are designed to be universally understood, in the manner of warning symbols on commercial packaging that are designed to protect consumers, or internationally recognized pictorial road signs.

The standardized symbols are meant to reduce the text needed to perform a procedure, assuring that individuals reading the symbols clearly understand them and safely perform the task indicated.

Arnold Taube, a strategic customer support engineer at John Deere and **Chair of SAE's Graphics Based Service Information Working Group**, which developed the recommended practice, said the symbols will be universally recognized and will save time and money in translations.

"At John Deere, we spend tens of millions of dollars translating documents for operation, repair and diagnostics in 37 languages," Taube said. "Every manufacturing company operating internationally is in the same boat. When these symbols are complete and in use, they will be applicable for automobile, truck and heavy equipment manufacturers."

"This is all an effort to reduced costs and communicate around the globe," Taube said. "A picture is worth a thousand words. If you illustrate, you don't need text. If there's no text, there's no need for translation."

Currently, the committee has created about 60 illustrations or symbols. They are color coded to call attention to the task and help with interpretation.

DELIVERY OPTIONS FOR SAE TECHNICAL STANDARDS

The more than 10,000 standards in the SAE database now include historical standards, and can be accessed through one of the targeted solutions below:

- **SAE Digital Library** is the industry's most comprehensive resource, encompassing 175,000+ technical papers, standards, and related publications from SAE and other renowned organizations. A customizable corporate solution! digitallibrary.sae.org
- **SAE Subscriptions** are online portfolios of SAE standards or technical papers focused on targeted technologies and industries. subscriptions.sae.org
- **SAE JPaks** let you decide how many ground vehicle standards you need and when you need them. Choose from packages that provide up to 10, 15, 25, 35, or 50 downloads per year. sae.org/jpaks
- **SAE Ground Vehicle Standards on DVD** provides convenient, portable access to more than 2,400 individual standards, recommended practices, and information reports. sae.org/gvcd

FIRST PUBLIC SAE COMBO FAST-CHARGING STATION OPENS IN SAN DIEGO

In conjunction with the 2013 Plug-In Conference, held September 30 – October 3, a new SAE Combo Fast Charging station for electric vehicles opened in San Diego.

Located at the Fashion Valley Mall and constructed by NRG, it is the first public charging station that complies with SAE International's electric vehicle fast-charging standard, "SAE J1772: Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charge Coupler."

J1772 covers the general physical, electrical, functional and performance requirements to facilitate conductive charging of EV/PHEV vehicles. The standard is the basis for the Combined Charging System (CCS), which allows for multiple types of charging, including both AC and DC, using just one plug.

The station can charge a depleted electric vehicle battery to 80 percent state of charge in less than 30 minutes and can be used with any electric vehicle equipped with the CCS.

The Chevrolet Spark, which is available in California and Oregon, and the BMW i3 are the first electric vehicles in the United States to offer the SAE J1772-based fast-charge connector as a vehicle option. The new station allows electricity to flow at a faster rate, which will make electric vehicles more convenient for longer trips by allowing faster charging times.



Rob Healy, EV Infrastructure Manager for BMW, charges the BMW i3 at the NRG eVgo Freedom Station in San Diego.

Audi, BMW, Daimler, Chrysler, Ford, GM, Porsche and Volkswagen have announced they will adopt the SAE combo fast charge connector standard for both the US and European markets.

J2954 TASK FORCE AGREES ON FACTORS FOR FORTHCOMING TECHNICAL INFORMATION REPORT

The **SAE International J2954 Task Force for Wireless Power Transfer (WPT) of Light Duty, Electric and Plug-in Electric Vehicles**, has agreed upon two key factors for a forthcoming Technical Information Report (TIR) on interoperability for the first phase of pre-commercial development.

The task force, consisting of OEMs, WPT Suppliers, industry experts, and government representatives, plans to complete the TIR in early 2014. That will be followed by publication of J2954, based on field data confirmation.

"A common frequency of operation for WPT is essential for interoperability," said **Jesse Schneider, Chair of the J2954 Task Force**. "After three years of international collaboration

and investigation within the team, consensus had been reached on a nominal frequency of operation for the light duty vehicle guideline. The SAE team has determined this nominal frequency of 85 kHz for SAE J2954."

In addition, the task force determined three power classes for light duty vehicles: WPT 1, 2 and 3. The task force is currently working on completing the remaining interoperability topics, including factors such as the minimum coupling factor "k", alignment, and coil geometries.

For more information or if you would like to join the task force, contact Pat Ebejer at pebejer@sae.org.

STANDARDS CONSORTIUM ADMINISTRATION

With over a century of experience providing the common engineering requirements for new mobility vehicles, SAE can be a key component in developing any consortium-based activity, providing the expertise and worldwide technological and human resources to help you turn your vision into a successful operating reality.

Each client maintains its desired degree of autonomy, flexibility, and control. Client/project-tailored services include:

- A legal framework
- Fiscal oversight
- Policy and procedure development
- Publishing and distribution services
- Marketing and public relations activities

RESS PROJECT STATUS REPORT DELIVERED TO NHTSA

Peter Byk and Keith Wilson, SAE Project Managers for Technical Programs, provided the annual project status report for the SAE Rechargeable Energy Storage System (RESS) Cooperative Research Project to the National Highway Traffic Safety Administration (NHTSA) on November 7 in Washington, DC.

Byk and Wilson were accompanied by Daniel Doughty PhD, who is participating in the RESS project in the role of Principle Investigator (technical lead). Project methodologies, participants, progress, finances, timing and next steps were discussed with NHTSA senior management staff.

Subject Matter Experts (SMEs) participating in the project have made significant progress in the development of detailed test procedures. In the fourth quarter of 2013, SMEs worked on completing the draft test procedures and the majority of Phase 1 testing.

The project is on track to meet all objectives and deliverables within the project timeline and budget. Expectations are for robust, well-defined, data-driven safety test procedures and recommendations for pass/fail criteria from the SMEs, working closely with the Project Review Team.

TOYOTA RECOGNIZED FOR IMPLEMENTING J2807

The Texas Auto Writers Association recently recognized Toyota with its Distinguished Service Award for implementing SAE International's J2807 towing standard. Toyota is the first company recognized for implementing the standard on its full-size pickups, as well as all models with towing capabilities.

"J2807: Performance Requirements for Determining Tow-Vehicle Gross Combination Weight Rating and Trailer Weight Rating," originally issued in 2008 and most recently revised in 2012 by the **Tow Vehicle Trailer Rating Committee**, establishes minimum performance criteria at gross combination weight ratings (GCWR), and calculation methodology to determine tow-vehicle trailer weight ratings (TWR) for passenger cars, multipurpose passenger vehicles, and trucks.



SUSTAINABLE MANUFACTURING TASK FORCE SURVEYS PALLET USE FOR INFORMATION REPORT

The **Sustainable Manufacturing Task Force of the Green Technology Steering Committee** has begun work on an information report on the use of pallets in the automotive and ground vehicle sector.

Pallets are an integral component for moving products in the industry, which has identified pallet size and material standardization as a means to enhance the reuse and recycling of pallets to reduce their contribution to landfill.

Currently in the early stages of development, "J3055: Pallet Size and Materials Standardization Information Report for the Automotive and Ground Vehicle Sector" will gather information about the industry's use of pallets. Information about the composition of pallets used in the automotive industry, and pallet terminology and definitions will also be included in the report.

As part of the information gathering process for the information report, the task force conducted a survey on pallet usage in late 2013. Industry participants were asked about materials used in

pallets, pallet sizes used, factors which impact decisions on pallet buying, and pallet use efficiency. Results of the survey were discussed at the task force's meeting in November.

The National Wooden Pallet and Container Association reports that there are more than 1.2 billion pallets in use in the United States each day. According to the California 2008 Statewide Waste Characterization Study, approximately 14% of all materials going to landfills are wood, mainly wooden pallets, and related material. It has been suggested that the use of higher quality materials, and standardization of pallet sizes, would encourage the recycling and reuse of pallets.

The Sustainable Manufacturing Task Force's goal is to share information and best practices to improve environmental performance by reducing environmental impacts, likely leading to improved operational efficiency, cost reductions, and meeting stakeholder expectations.

NEED FOR FUTURE STANDARDS DISCUSSED AT NATURAL GAS KICK-OFF MEETING

The SAE Truck and Bus Council held a "Natural Gas Kick-Off Meeting" on December 4. Following on the heels of a successful Blue Ribbon Panel on Natural Gas held at the 2013 SAE Commercial Vehicle Engineering Congress in October, the meeting served as a launch for the effort to establish relevant SAE standards to help the heavy-duty trucking industry more quickly embrace natural gas-based technologies.

The meeting was the first step towards establishing a Natural Gas Fuel Systems Task Force. The task force will identify needs surrounding standards, regulations, and specifications pertaining to natural gas, review existing standards, assess the gaps, and formulate a plan to develop a robust set of SAE standards where required.

Sixteen industry leaders and experts attended the kick-off meeting, led by Paul Johnston, Chair of the Truck and Bus Council, and Doug Horne, Chair of the Alternative Fuels Committee.

Forecasts show that the demand for natural gas as a transportation fuel will grow substantially over the next six years. Currently, most natural gas fuel consumption is concentrated in the heavy-duty trucking industry.



The next natural gas meeting will be held in early January. For more information, or to participate in the Natural Gas Fuel Systems Task Force, contact Jana Wright at jwright@sae.org.

FUEL SYSTEMS STANDARDS BEING REVISED

The **Fuel Systems Standards Committee** is working on revising a number of documents to include information on biodiesel. The committee has sponsored a series of workshops and discussions on biodiesel in preparation of its forthcoming revision of J1681 ("Gasoline, alcohol, and Diesel Fuel Surrogates for Materials Testing"). A revision of J2260 ("Nonmetallic Fuel System Tubing with One or More Layers") is also planned.

The SAE World Congress offers a great opportunity to learn about the SAE Standards Development Program and how you can become involved. Visit the SAE International exhibit near event registration for information.

Plus, many SAE Global Ground Vehicle Standards Committee Meetings will take place in conjunction with the Congress at SAE's Troy, MI office. Check the World Congress online event guide for current an up-to-the-minute schedule.

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SAE STANDARDS DEVELOPMENT COMMITTEES SEEKING EXPERTS AND VOLUNTEERS

The **Capacitive Energy Storage Committee** is seeking experts (from both OEMs and suppliers) in the battery area to become members. This committee will be involved in the creation of a performance specification for super-capacitors for use in automotive traction applications. For more information, contact Pat Ebejer at pebejer@sae.org.

The **SAE Active Safety Technical Committee** is seeking members for three working groups which will address some immediate high-priority committee topics. The Definitions and Terms Workgroup to focus on review of existing industry glossary documents to identifying which existing terms and definitions could be adopted by the AS3 committee, and what additional terms and definitions may need to be established by the AS3 committee. The CIB/AEB Workgroup will focus on review of available test procedures, surrogate targets and performance requirements, identifying which existing methods could be adopted by AS3 committee, and what additional test methods or equipment may need further definition or agreement among the AS3 committee. The Sensor Fusion Workgroup will focus on defining performance level capabilities for active safety systems based on the sensing system combinations selected. For more information, contact Nikki Ameredes at ameredes@sae.org.

The **Materials, Processes, and Parts Council committees**, specifically Acoustical Materials, Automotive Adhesives and Sealants, Carbon and Alloy Steels, Plastics, Spring, and Materials Committee, are seeking members. For more information, contact Jill Kqiraj at 1-248-273-2468 or gjysta@sae.org.

The **Driver Vision Standards Committee**, responsible for developing and maintaining SAE standards, recommended practices and information reports related to road vehicle components and factors that affect an occupant's field of view, is seeking members. For more information, contact Nikki Ameredes at nameredes@sae.org.

The **Connector Systems Standards Committee** (under the Electrical Distribution Steering Committee) is seeking members to participate in its standards development activities. This committee provides opportunities for young engineers engaged in specifying the physical layer of vehicles to learn from the experts who have been working in this field for decades. For more information, contact lfeather@sae.org.

SAE INTERNATIONAL

FOR ON- AND OFF-ROAD HARMONIZED STANDARDS SOLUTIONS, ALL ROADS LEAD TO SAE

Since 1905, SAE International has been providing the common engineering requirements for new mobility products, advanced technologies, and applications. It is uniquely positioned to provide innovative standards solutions to the global on- and off-road industries and their engineering challenges.

For automotive vehicles, SAE plays the central role in developing essential North American emissions and safety standards to meet some of the most stringent regulations in the world. Through ISO, it plays a key role in bringing standards for and from the United States market to the global table. As the center of expertise on Commercial Vehicle/ConAgg standards development, many of its standards are adopted by ANSI and ISO.

SAE offers a full suite of standards capabilities—committee management, consensus-based standards development, consortium administration, cooperative research, and database development—providing industry, companies, and individuals with extensive opportunities to participate, influence, grow, and prosper.

www.sae.org



WARD ATKINSON, LONGTIME INTERIOR CLIMATE CONTROL COMMITTEE CHAIR, HONORED

SAE International recognizes **Ward Atkinson for his long tenure of service to SAE's Interior Climate Control (ICC) committees**. An SAE member for 60 years, Atkinson, President of Sun Test Engineering in Scottsdale, Arizona, has been chairing SAE ICC-related committees since the 1960's.

Atkinson was the committee's Chair from 1978 to 2009, then served as Co-Chair, with William Hill, until mid-2013. His service to related SAE Interior Climate Control committees includes the following:

- Chair of the Interior Climate Control Service Committee from 2003 to 2009 (then Co-Chair with Hill until 2013)
- Chair of the Interior Climate Control MAC Supplier Committee from 2004 to 2009 (then Co-Chair with Hill until 2013)
- Chair of the Interior Climate Control Vehicle OEM Committee from 1999 to 2009 (then Co-Chair with Bill Hill until 2013)
- Chair of the Internal Climate Control Fluids Committee from 2002 to 2009 (then Co-Chair with Bill Hill until 2013)

Atkinson remains active as a member of these committees. Over the course of his tenure, he has sponsored 56 documents.

"Ward's desire was that SAE's standards would be global, and the team we put together truly had representation from all areas of the globe," said **Bill Hill, his longtime co-chair on the Interior Climate Control committees**. "He was also passionate about involving original equipment suppliers in the issues that developed in the aftermarket. He also strove to engage regulators to use SAE standards for technical reference."

"Ward has a passion that engineers take a hands-on approach to design," Hill said. "He always said that engineers should get away from their computer screens and 'see, taste, and feel' the product to really understand how the consumer perceives what they are delivering."

The committee received the U.S. Environmental Protection Agency (EPA) 2003 Climate Protection Award. In 1998, Atkinson received SAE's 1998 Arch T. Colwell Cooperative Engineering Medal. He also

authored seven SAE technical papers, and organized numerous SAE conferences on alternative refrigerants.

Atkinson is a member of the EPA Mobile Air Conditioning subcommittee of the Stratospheric Ozone Protection Advisory Council. Since 1990, he has also served as a technical advisor to the Mobile Air Conditioning Society (MACS).



Ward Atkinson

"As senior technical advisor to MACS for more than 20 years, Ward's insight and guidance have been, and remain to this day, essential to MACS' mission of providing information, training and communication for the mobile air conditioning service industry," said Elvis Hoffpauir, President, Mobile Air Conditioning Society. "Ward's leadership from his longstanding tenure as chairman of SAE International's Interior Climate Control Steering Committee through critical phases of the industry's transition to new refrigerants has been invaluable."

The new chairs and vice chairs of the Interior Climate Control committees are:

- Interior Climate Control Steering Committee: **Angelo Patti**, Chair; **Brian Styles**, Vice Chair
- Interior Climate Control Service Committee: **Paul Weissler**, Chair; **Peter Coll**, Vice Chair
- Interior Climate Control MAC Supplier Committee: **Gene Dianetti**, Chair; **Larry Wei**, Vice Chair
- Interior Climate Control Vehicle OEM Committee: **Curtis Vincent**, Chair
- Interior Climate Control Fluids Committee: **Ryan Fortier**, Chair; **Chris Seeton**, Vice Chair

AN ECONOMICAL PATHWAY FOR JOINT VENTURE RESEARCH: THE COOPERATIVE RESEARCH PROGRAM OF SAE

Cooperative research ventures serve to bring more minds to the challenges and issues faced by industry. The result is a more robust project than each participating organization could complete independently. The pooling of financial resources also affords each participant more efficient use of their research budgets and eliminates duplication of efforts. Whether moving forward on the development of fuel cell standards... researching alternative refrigerants...or developing a database of human body measurements to foster ergonomic designs, SAE's Cooperative Research Program can assist your company in its collaborative research needs.

To learn more contact Gary Pollak, Program Manager +1-724-772-7196; gary@sae.org



SAE INTERNATIONAL HONORS 23 WITH THE TECHNICAL STANDARDS BOARD OUTSTANDING ACHIEVEMENT AWARD

In December, SAE International honored 23 automotive, commercial vehicle, and aerospace engineering professionals with the SAE 2013 Technical Standards Board Outstanding Achievement Award.

Established in 1953, the Technical Standards Board Outstanding Achievement Award recognizes individuals for outstanding service in the technical committee activities of SAE International. This includes valuable contributions to the work of SAE International technical committees, unusual leadership in the activities of an SAE International technical committee, significant contributions as a representative of SAE International to the accomplishments of technical committees of other organizations or of government agencies, and outstanding contributions to SAE International technical committee work in the form of research, test methods and procedures, and/or development of standards.

The recipients include:

- Robert Brocx, Lab Manager, Red Dot Corporation
- Richard K. Deering, President, RK Deering & Associates, Inc.
- Tim Duncan, Vice President, Link Engineering Company
- Daniel J. Fogarty, (2012 TSB Award Recipient), Boeing Commercial Airplanes
- Gregory V. Gillham, Manager, Detroit Diesel Corp.
- John S. Kinsey, Environmental Scientist, U.S. Environmental Protection Agency

- John M. Kremer, Materials Engineering – Powertrain, General Motors Company
- Drew Landman, Professor, Old Dominion University
- Timothy Walter Lee, Supplier Quality Manager, The Boeing Company
- Stanley Lew, Manager, Michelin North America, Inc.
- Michael Lyons, Technical Lead, Caterpillar Inc.
- Mark McGory, President, Jamac, Inc.
- Frederick J. Moon, Principal Engineer, Bell Helicopter
- Tony Moore, Director Engineering Brake and Safety Systems (retired), Daimler Trucks North America
- Thomas J. Poorman, General Manager, North American Lighting, Inc.
- Brian Rayner, Aviation Lubricants Consultant, Aviation Lubricants Consultant
- Robin Dana Reed, Director, Global Engineering, TE Connectivity
- Monique N. Richard, Principal Engineer, Toyota Motor Engineering & Manufacturing N.A. Inc.
- John P. Sunne, (Retired) Director, OEM Technical Liaison, Afton Chemical Corporation
- Chuck Trueman, Engineering Manager, PACCAR Technical Center
- Curtis Vincent, Senior Project Manager, General Motors Company
- Lisa Christine Uhl, Manager, Hydraulic Brakes and Accessory Systems, Mechatronics Engineering, Daimler Trucks North America
- Eugene Williams, Senior Development Engineer (Retired), Horton Inc.

NEW COMMITTEES, NEW CHAIRS

Newly-formed committees

Under-hood Brake Hose Specification Investigation Task Force under Automotive Brake and Steering Hose Standards Committee

Complex Emergency Warning Devices Task Force under Emergency Warning Lights and Devices Standards Committee

New chairs on newly formed committees

J1802 Blind Spot Monitoring Task Force under Safety and Human Factors Standards Steering Committee – **Dan Minikey**, company

J2364, J2365, J2678 Task Forces under Safety and Human Factors Steering Committee – **Dave Weir**, company

J2830 Task Force under Safety and Human Factors Steering Committee – **John Campbell**, company

J2395 Task Force under Safety and Human Factors Steering Committee – **Jim Foley**, company

J2396 Task Force under Safety and Human Factors Steering Committee – **Linda Angell**, company

J2808 Task Force under Safety and Human Factors Steering Committee – **Dean Chiang**, company

Fuel and Lubricants TC3 Task Force for J306 under Fuels and Lubricants TC3 Driveline and Chassis Lubrication Committee – **Christopher A. Engel**, Lubrizol Corp.

J1616 Recommended Practice Compressed Natural Gas Vehicle Task Force under Fuels and Lubricants TC7 Fuels Committee – **Bob Petsinger**, CNG Services International

New chairs

Don Smolenski, Evonik Oil Additives – Fuels and Lubricants Council Vice Chair

TO ALL THE COMMITTEE CHAIRS – THANK YOU AND KNOW THAT YOUR VOLUNTEER EFFORTS ARE GREATLY APPRECIATED!

Interested in volunteering your expertise on these newly formed committees? Contact SAE via the following link: <http://www.sae.org/standardsdev/participationReq.htm>

SAE STANDARDS DEVELOPMENT ON THE ROAD: A RE-CAP OF RECENT EVENTS AT WHICH SAE PARTICIPATED

Mary Doyle, SAE Support Team Supervisor was in China in September to present two SAE Standards Development Workshops for the **Chinese Automotive Technology and Research Center (CATARC) and the Shanghai Motor Vehicle Inspection Center (SMVIC)**. The workshops provided attendees with a comprehensive, practical guide to SAE's process for developing its global ground vehicle standards.

Gary Pollak, SAE Cooperative Research Program Manager participated in the Emerging Technology Panel Session coordinated by the SAE Truck and Bus Council at the **SAE Commercial Vehicle Engineering Congress in Chicago, Illinois**, October 1-3.

Keith Wilson, SAE Project Manager, Technical Programs spoke about automotive industry standards for the safe use of lithium ion battery packs at the **5th Annual International**

Symposium on Electric Vehicle Standards and Regulations on October 11th in Ningde, China. Keith discussed SAE EV / PHEV standards development activities and technical projects to support the advancement of industry standards.

A potential new CRP project in the area of heat pump system development for new refrigerants was presented by Gary Pollak during the **SAE TMSS Meeting in Troy, Michigan** on October 22-24. A call for industry participants was made for a possible project start in early 2014.

Keith Wilson spoke about SAE Rechargeable Energy Storage System (RESS) and SAE EV / EVSE Charging Interoperability Cooperative Research Projects on November 12 at the **SAE 2013 New Energy Vehicle Forum in Shanghai, China**. Keith also discussed SAE EV / PHEV standards development activities and global battery standards.



SAE INTERNATIONAL

STANDARDS MATTER. AND SO DO YOU.

Standards are published documents that set out specifications and procedures to ensure products and systems are safe, reliable, and consistently perform the way they were intended. They serve to protect... support innovation...boost production and productivity... make businesses more competitive...link businesses to the world...complement regulation and make markets work better....and, reward individual participants personally and professionally.

Standards matter—and so does the ongoing need for involvement from people like you to participate in the development of these technical documents for the aerospace and ground vehicle industries.

For the important work of standards, SAE International and the mobility industry is currently in need of volunteers with the technical expertise to participate on the following standards development committees. If you possess the technical knowledge as related to these committees, we urge you to contact us. **Because standards matter and so do you.**

[Learn more, express interest at + 1.724.772.7161 or http://www.sae.org/standardsdev/participationReq.htm](http://www.sae.org/standardsdev/participationReq.htm)

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SAE INTERNATIONAL GROUND VEHICLE STANDARDS DEVELOPMENT COMMITTEES CURRENTLY SEEKING YOUR TECHNICAL EXPERTISE.

- Capacitive Energy Storage Committee
- Active Safety Technical Committee and these workgroups:
 - Definitions & Terms,
 - CIB/AEB,
 - Sensor Fusion
- Materials, Processes, and Parts Council Committees
- Driver Vision Standards Committee
- Connector Systems Standards Committee

For specific opportunities related to these areas contact SAE.

CORPORATE CONTRIBUTORS TO THE SAE GROUND VEHICLE STANDARDS DEVELOPMENT PROGRAM (2013)

SAE International acknowledges the following organizations that have funded the standards program this past year—supporters who acknowledge the benefits common engineering requirements bring to industry and their business.

THANK YOU.

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VOLUNTEER RECOGNITION: DOCUMENT SPONSORS (AUGUST – NOVEMBER 2013)

The following individuals have served as active committee members and have dedicated their time and talent in guiding the development of standards documents from the preparation of all drafts through balloting and publication.

THANK YOU.

Arnold Taube	John Deere World Headquarters	Kin Moy	Youngstown State University Inc
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