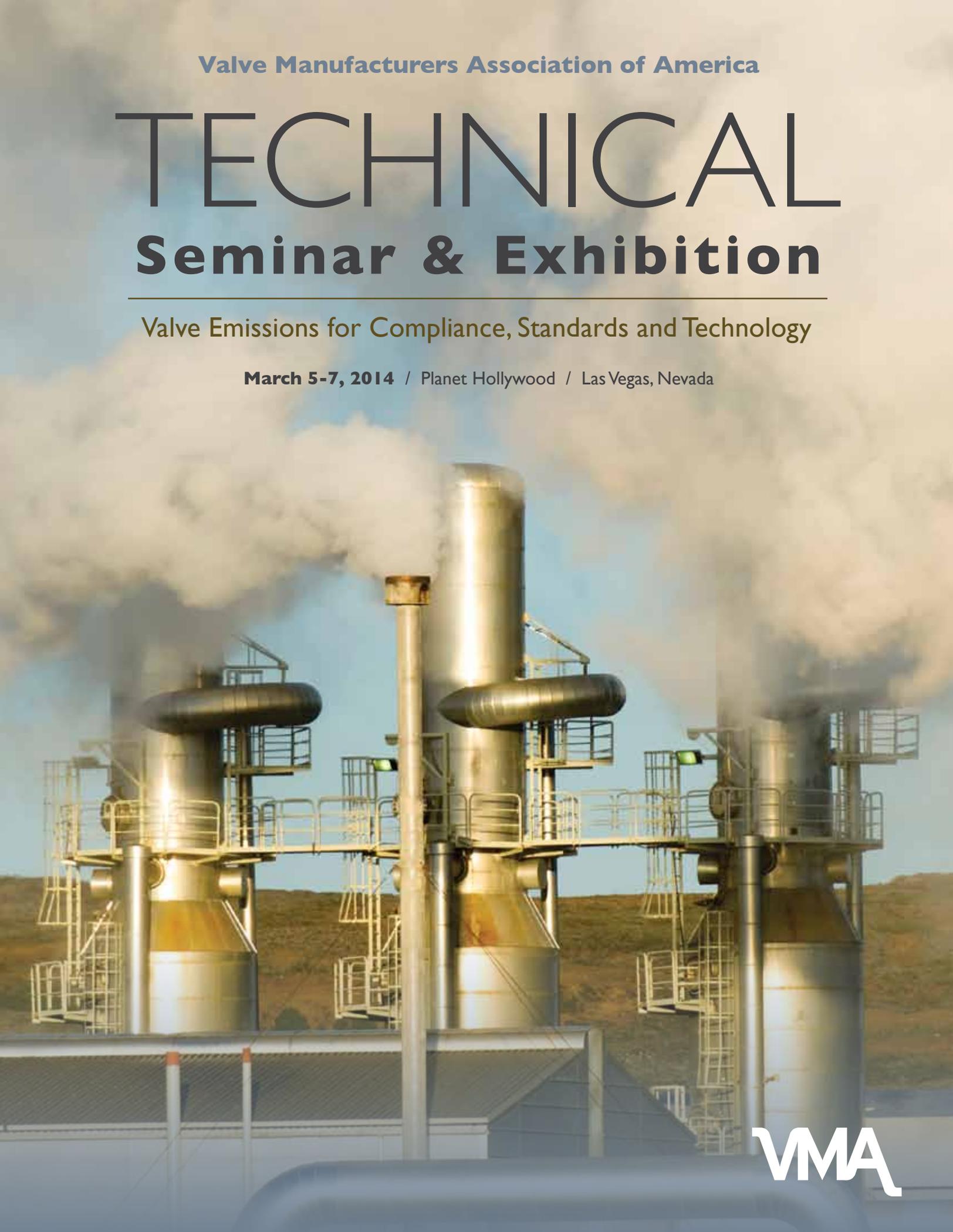


Valve Manufacturers Association of America

TECHNICAL Seminar & Exhibition

Valve Emissions for Compliance, Standards and Technology

March 5-7, 2014 / Planet Hollywood / Las Vegas, Nevada



VMA

Valve Emissions for Compliance, Standards and Technology

March 5-7, 2014 / Planet Hollywood / Las Vegas, Nevada

PROGRAM

Wednesday, March 5

12:30 – 5:15 PM

Hoover Dam “Inside and Out” Tour (ticket required)

Tour will leave from the lobby of the hotel

The Hoover Dam towers above the Colorado River on one side and Lake Meade on the other. Enjoy an up-close tour of this man-made wonder of the modern world. The Bureau of Reclamation started conducting tours through the Hoover Dam and Power Plant in 1937. This tour will explain why and how the dam came into being, and then take your 500 feet down into the wall of the Black Canyon where a 250 ft. tunnel drilled out of rock will take you to view the 650 ft. long Nevada wing of the power plant with its eight generators that supply power and water to much of the modern Southwest. Fee includes transportation to and from the tour and a boxed lunch.

Thursday, March 6

7 AM

Registration and Continental Breakfast

Celebrity Ballroom 7 & 8

7:50 AM

Welcome

Jeff Hager, Chair, VMA Technical Committee, Product Development, Weir Valves and Controls, Inc.

8 – 8:50 AM

Keynote Address: Impacts of Leaking Valves

Celebrity Ballroom 7 & 8

*Keynote Speaker: **Ken Garing**, Chemical Engineer, US Environmental Protection Agency - NEIC*

*Moderator: **Arie Bergman**, Vice President and General Manager, DFT Inc.*

Governmental regulation and enforcement has been getting tighter and tighter in recent years. The EPA through the regional offices and National Enforcement Investigation Center has been actively inspecting chemical plants, asphalt plants and refineries throughout the U.S. keying in on valves, flanges, connectors, compressors and pumps to identify where fugitive emissions occur. The goal is to develop the record keeping and reporting structure needed to further reduce fugitive emissions

that are released into the atmosphere from whatever the source. This presentation will describe those efforts coupled with new regulations that are being put into effect through CFR changes and decrees and the impact that these stricter guidelines will have on these industries in general and our valve products in specific.

SESSION I – Chemical Industry View

8:50 – 9:35 AM

Accessibility of Low Emitting Valves and Packing to meet Consent Decree Requirements in the Chemical Industry

Celebrity Ballroom 7 & 8

*Speaker: **Dan DeVine**, Valve Technology Resource Leader, Dow Chemical Company*

*Moderator: **Dale Friemoth**, Vice President, Technology & Business Development, Crane Fluid Handling*

This presentation addresses the commercial availability of low fugitive emission valves and packing that comply with Consent Decree requirements issued by the U.S. EPA. This is an area in which the EPA is actively focusing. Explanation of a Consent Decree, low emission definitions, challenges to finding qualified low emission products, and possible implications for the valve industry will be discussed.

9:35 – 9:50 AM

Refreshment Break

Celebrity Ballroom 7 & 8

10 AM – Noon

Exhibit Set-up

Celebrity Ballroom 5 & 6

SESSION II – Refining Industry View

9:50 – 10:35 AM

Improving Fugitive Emissions Performance - One Owner's Perspective

Celebrity Ballroom 7 & 8

Speakers: **Rich Sobilo**, Technical Authority, Fixed Equipment, BP Whiting Refinery

Stephen McJones, Advisor, Vessels and Piping, BP Products, North America

Moderator: **Stephane Meunier**, Manager International Projects, Velan Valve Corporation

As Industry and the EPA looks to reduce VOC emissions from refining and petrochemical facilities, valves must play a crucial part. This discussion will revolve around one owner's early efforts to minimize fugitive emissions at one site from their largest source, the over 70,000 monitored valves. Subsequently with a recent agreement with the EPA, this site is one of the first in the country to enact a 'Low Emission Valve Qualification Program'. The owner will share their experience in initiating the program and recent efforts in the valve industry which will help owners in the future.

SESSION III – Seal Manufacturers View

10:35 – 11:20 AM

Valve Packing and Gasket Research and Development Devices

Celebrity Ballroom 7 & 8

Speaker: **Jose Veiga**, Technical Director, Teadit Group

Moderator: **Jim Barker**, Director of Customer Order Management and Administration, DeZurik APCO

The continuous improvement of valve packing technology has created a new baseline for the industry to achieve emission levels that were only possible with the use of bellows seals. To develop low emission valve packing and bonnet gaskets it is necessary to have testing devices that simulate the actual service conditions while the critical parameters are monitored. This presentation reports testing devices available to the help valve packing and gasketing manufacturers engineer products that reduce emissions and meet new standards set by EPA consent decrees.

SESSION IV – Third Party Test Lab Overview of Test Standards

11:20 AM - Noon

Third Party Test Lab Overview of Test Standards

Celebrity Ballroom 7 & 8

Speaker: **Matt Wasielewski**, President, Yarmouth Research and Technology, LLC

Moderator: **David Escobar**, Director of Engineering, Metso Automation USA, Inc.

Fugitive emission testing has become an important criteria for valves in the USA since the Clean Air Act Amendments of 1990. The first nationally recognized test standards from the ISA and FCI organizations were first released in 1993-1994. Today, the most prominent test standards for valves and stem seals are the API 622, ISO 15848-1, ChevronTexaco standard, and the newly released API 624. This presentation will provide an overview of all the test parameters for each of these standards and emerging trends in fugitive emissions testing.

Noon – 1:30 PM

Lunch/Exhibits Open

Celebrity Ballroom 5 & 6

SESSION V – MSS + ASME B16.34

1:30 – 2:15 PM

Updates for MSS SP 144, Pressure Seal Valves and ASME B16.34, 2013 Edition

Celebrity Ballroom 7 & 8

Speaker: **Carlos E. Davila**, PE, Product Manager-Americas, for Crane ChemPharma/Energy Flow Solutions

Moderator: **Jim Barker**, Director of Customer Order Management and Administration, DeZurik APCO

Presentation will detail the history of the pressure seal valve requirements over the years and the development of current MSS SP-144 Standards Specification for pressure seal valves in the industry. Topics discussed will include purpose for the design with regard to fugitive emissions, type of valves covered as well as wall thicknesses requirements, sizes and pressure classes and component material requirements. Additionally, the updates to the recent ASME B16.34 2013 edition will be discussed. Proposed changes for the next edition will also be reviewed.

SESSION VI – ISA 96 + API 6DX

2:15 – 3:00 PM

Methods and Advances in Actuation of Remote Operated Valves and Automatic Operated Valves on Natural Gas Transmission Pipelines

Celebrity Ballroom 7 & 8

Speaker: **Mike McQuade**, Senior Product Manager for Emerson Process Management - Valve Automation

Moderator: **Bill LeBlanc**, Engineering Manager, Emerson Process Management

Government regulations require block valves to be installed on natural gas pipelines at various distances depending on the population density, pipeline diameter and operating pressure. Government agencies are also requiring pipeline operators to evaluate if remote control valves or automatic control valves might be effective in adding protection to highly populated areas in the event of a pipeline rupture. The purpose of the presentation is to describe the available methods for actuation of remote control valves and automatic control valves and explain some of the advantages of the newer technologies.

3 – 3:30 PM

Afternoon Break/Exhibits Open

Celebrity Ballroom 5 & 6

SESSION VII – API20'S + 6D

3:30 – 4:15 PM

API Upstream Standard Development Update-Monogram, Product Specifications and Supply Chain Management

Celebrity Ballroom 7 & 8

Speaker: **Rick Faircloth**, Principal Engineer, Cameron Valves and Measurement

Moderator: **Ron Manson**, Director of Application Engineering, Cameron Valves and Measurement

This presentation will provide the latest update on the API Monogram license program as it applies to the 6D product specification as well as major changes to the 24th edition of 6D, which will affect how product is ordered.

Additionally the presentation will provide an overview of all the API SC20 – Supply Chain Management specifications published and update on future specifications to be published with a review of how the specifications are being adopted by the supply chain and customers.

4:15 – 5 PM

Panel Discussion

Celebrity Ballroom 7 & 8

Moderator: **Jeff Hager**, Chair VMA Technical Committee, Product Development Weir Valves & Controls

5 – 6 PM

VMA Welcome Reception/Exhibits Open

Celebrity Ballroom 5 & 6

Friday, March 7

8 – 8:30 AM

Continental Breakfast

Celebrity Ballroom 7 & 8

SESSION VIII – Powdered Metal View

8:30 – 9:15 AM

Advances in Powder Metallurgy-Hot Isostatic Processing for Pressure Retaining Applications

Celebrity Ballroom 7 & 8

Speaker: **David W. Gandy**, FASM – Technical Executive Nuclear Materials, Electric Power Research Institute

Moderator: **Dave Escobar**, Director of Engineering, Metso Automation, USA, Inc.

For more than 60 years now, the nuclear power industry has relied on structural and pressure retaining materials generated via established manufacturing practices such as casting, plate rolling-and-welding, forging, drawing, and/or extrusion. During the past four years, EPRI has been leading the development and introduction of another established process, powder metallurgy and hot Isostatic pressing (PM/HIP), for pressure retaining applications in electric power industry. The research includes assessment of two primary alloys: 316L stainless steel and Grade 91 creep-strength enhanced ferritic steels, for introduction into the ASME Boiler and Pressure Vessel Code. Continuing DOE and EPRI research on other structural/pressure retaining alloys such as Alloy 690, SA 508 Class I, Alloy 625, hard-facing materials, and others are also underway. This research will have a tremendous impact as we move forward over the next few decades on the selection of new alloys and components for advanced light water reactors and small modular reactors. Furthermore, fabrication of high alloy materials/components may require the use of new manufacturing processes to achieve acceptable properties for higher temperature applications such as those in Generation IV applications. Current research by EPRI and DOE will be reviewed and emphasis will be targeted at advanced applications where PM/HIP may be applied in the future.

SESSION IX – New Materials for the Valve Industry

9:15 – 10 AM

Evolving Needs in Non-Metallic Seats and Seals

Celebrity Ballroom 7 & 8

*Speaker: **Dr. Tim Bremner**, Vice President of Materials Technology, Hoerbiger Corporation of America, Inc.*

*Moderator: **Ron Manson**, Director of Application Engineering, Cameron Valves and Measurement*

Performance requirements for non-metallic components in valve systems continue to expand along many vectors; higher service temperatures, single material solutions for broad operating temperature ranges, higher pressures and differentials, and larger physical dimensions of the valves. These drivers push the industry to the limits of where traditional elastomer based seals and the typical thermoplastic seat materials can function. New materials and manufacturing technologies are being developed to meet the increasing technical demands in both the commercial space and the pre-commercial R&D space for longer time horizon needs. This presentation will provide a contrast between existing commercial non-metallics used in valves, and will provide detail on some of the successes of new materials that are available now or will be in the near future. Equally important, discussion of some areas of uncertainty which exist in the newest of these materials with regards to long term reliability and manufacturing consistency will be presented. Finally, a brief discussion of the challenges of drop-in replacement of elastomer based seals with thermoplastic based seals in existing field installations will be presented from a design engineering perspective.

10 – 10:15 AM

Refreshment Break

SESSION X – SIL

10:15 – 11 AM

Practical and Robust Implementation of the IEC Functional Safety Standards

Celebrity Ballroom 7 & 8

*Speaker: **Chris O'Brien**, Partner, Exida Consulting*

*Moderator: **Stephane Meunier**, Manager International Programs, Velan Valve Corporation*

The release and adoption of IEC 61508 and IEC 61511 has created new requirements for all organizations involved with equipment used in safety related systems. As these functional safety standards are applied more broadly across industry and referenced more frequently as examples of best practice by industry and product standards the importance of meeting them is increasing. The requirements of the standards are new to many end users, EPCs, and manufacturers of valve, actuator, and other devices used in the final element which can result in effort invested in areas that do not guarantee compliance or increased safety reliability.

This presentation will review the functional safety standards along with the steps necessary to meet them. IEC 61508 will be examined including the Safety Lifecycle, keys documentation necessary, and information that is supplied to end users. IEC 61511 will be reviewed to examine the impact of the information supplied by manufacturers. Examples from both the manufacturer and end user viewpoint will be provided to illustrate common pitfalls as well as best practices.

11 – 11:30 AM

Panel Discussion

Celebrity Ballroom 7 & 8

*Moderator: **Arie Bergman**, Vice President and General Manager, DFT Inc.*

11:30 AM

Seminar Adjourned

TECHNICAL SEMINAR SPEAKERS

Speakers - Thursday, March 6

Ken Garing - Keynote Speaker

Chemical Engineer, US Environmental Protection Agency - NEIC

Ken is a chemical engineer and has been working at the EPA since 1987. Since starting with the EPA Ken has conducted air inspections at large refiners and chemical plants. He has coordinated dozens of leak detection and repair inspections and was the EPA national expert on developing the refinery global settlements. He is currently involved in developing new equipment, like the IR camera, to detect and quantify fugitive emission sources.

Dan DeVine

Valve Technology Resource Leader, Dow Chemical Company

Dan DeVine began his career in 1987 working for the Union Carbide Corporation after graduating from the University of Iowa with a Bachelor of Science degree in Chemical Engineering. He has worked in several typical chemical industry positions, with the majority of his time spent in engineering design functions for valve, piping, and pressure vessel technology. He is currently the Valve and Sealing (Packing) Technical Resource Leader at Dow Chemical, and has successfully implemented a low emission valve and packing program for regulatory compliance at the Midland Michigan Operations Site.

Rich Sobilo

Technical Authority, Fixed Equipment, BP Whiting Refinery

With a background in design, stress analysis, modeling and equipment management, Rich has been involved with full life cycle design of engineering equipment for over 25 years. In his capacity of Technical Authority at BP, he specializes in relief valves, aboveground storage tanks, fire protection and commodity and specialty valves. Through extensive teardown inspection protocols, performance data analysis, FMEA, RCFA as well as design review, quality assurance and audits and other strategies on the front end, he has helped to lead BP to much success in improving equipment life.

Stephen McJones

Advisor, Vessels and Piping, BP Products, North America

Stephen McJones has over 30 years of refinery experience with an emphasis on pressure vessels, heat exchangers, and piping and sealing technologies. In his role as technical authority for BP, he is involved in the development of company engineering standards for repaired equipment such as piping, valves and fabricated equipment. In addition to providing technical support to BP refining sites for maintenance and capital projects, he has been the technical lead working with central procurement

to develop an Accepted Manufacturers List for Gate, Globe & Check Valves for North America Refining. In support of this effort over 50 valve manufacturing locations have been audited around the globe.

Jose Veiga

Technical Director, Teadit Group

Mr. Veiga is a Professional Mechanical Engineer who graduated from Rio de Janeiro Catholic University. He is also author of the "Industrial Gaskets" book now in its 6th edition. He has had more than 35 years in the packing and gasketing industry focusing on development, manufacturing processes and application solutions. He holds many patents and has presented numerous papers at conferences around the world. Currently he is the Technical Director of the Teadit Group.

Matt Wasielewski

President, Yarmouth Research and Technology, LLC

Matt Wasielewski started Yarmouth Research and Technology in 1992 after working for several years at a major valve manufacturer as a Design Engineer. Matt was a committee member on one of the first fugitive emission test standard committees, the ISA group, which released its standard in 1993. He is currently an active participant in the API, and the Valve World conferences, having presented papers in fugitive emission and fire testing in Europe and China. Matt has personally performed over 1000 API fire tests and hundreds of fugitive emission tests at Yarmouth.

Carlos E. Davila

PE, Product Manager-Americas, for Crane ChemPharma/Energy Flow Solutions

Mr. Davila is a Registered Professional Engineer and a graduate of the University of Houston with a Bachelor of Science in Mechanical Engineering. As Chief Engineer, Technical Operations Manager and General Manager he was involved in the design, development, application and production of both check valves and butterfly valves. Later as Product Manager, he introduced new updates and promoted valves to the market. He currently serves as Vice-Chair of the ASME B16 Standards Committee, Chair of the Flanges Subcommittee C and member of valves sub-committee N. Mr. Davila is also a member of ASME B31.3 Committee addressing Process Piping. Manufacturers Standardization Society (MSS) Board of Directors and chair of the Technical Committees on Quality Standards, Metallic Flanges and Diaphragm Valves. He also serves as a member of ANSI/ISO Team and Chair of ISO TC5/SC10. Mr. Davila has over 45 years in the valve industry and has been an active member of the API Manufacturers Subcommittee on Piping and Valves for over 33 years.

Mike McQuade

Senior Product Manager for Emerson Process Management - Valve Automation.

Mike McQuade is a Senior Product Manager for Emerson Process Management - Valve Automation. He has been employed with the company for 25 years. Mr. McQuade has the basic responsibility to ensure that his product portfolio is robust, investments are sound and that the company's products meet the market needs and expectations. His function includes translating the voice of the customer into new product specifications and then serves as a member on the product development and launch teams. Mr. McQuade holds a BBA degree in Marketing from Ohio University and a B.S. degree in Electrical Engineering from Ohio State University.

Rick Faircloth

Principal Engineer, Cameron Valves and Measurement

Rick holds a B.S. in Engineering Technology and Diploma in Welding Metallurgy and has more than 45 years' experience in the field of steel melting, castings, forgings, heat treatment, materials, nondestructive examination, quality, welding and technical standards development. In his career, Rick has held numerous positions in manufacturing, quality management, project management, standards management and engineering and has spent 35 years in API Upstream Standards development and 22 years in ISO Pipeline transportation systems standards development. Rick is currently involved in numerous API and ASME technical committees for standards development and serves as Chairman of API SC6 TGI on pipeline valves as well as a member of ASME B16 Subcommittee N, B16.10 and B16.34

Speakers - Friday, March 7

David W. Gandy

FASM – Technical Executive Nuclear Materials, Electric Power Research Institute

David Gandy is a Technical Executive in EPRI's Nuclear Materials area where he is responsible for technical oversight of major projects on powder metallurgy, advanced welding, corrosion-fatigue, and next-generation erosion/wear resistant alloys. Mr. Gandy also manages a cross-cutting Strategic Program on Advanced Materials which addresses long-term degradation issues and new alloys for both nuclear and fossil applications. Prior to his current role, Mr. Gandy managed EPRI's Technology Innovation Program where he was responsible for promoting innovative, exploratory and strategic technologies across the Institute to accelerate the adoption of these technologies within the electricity industry. His duties include operational oversight of 14 long-range, strategic programs. Mr. Gandy managed EPRI's Fossil Materials and Repair program from 2004 through 2008.

Mr. Gandy is recognized as an ASM International Fellow. He received his B.S. degree in Materials Science & Engineering from North Carolina State University. He currently holds 11 U.S. Patents and has authored over 200 journal articles and technical reports. He is a member of ASME Boiler & Pressure Vessel Code Section II – Materials Standards Committee and Subgroup member of Section II/IX Strength of Weldments.

Dr. Tim Bremner

Vice President of Materials Technology, Hoerbiger Corporation of America, Inc.

Dr. Bremner received his Ph.D. in Polymer Chemistry from the University of Waterloo in Canada. After two years as a Post Doctoral Fellow at the University of Queensland in Australia with the Polymer Materials and Radiation Group, he returned to Waterloo as a Post Doctoral Fellow conducting research in the field of polymer physics. Tim spent five years with Nova Chemicals R&D in process technology and product development, as well as, four years with Aspen Technology in Houston in the field of advanced process control and process technology modeling. He joined Hoerbiger in 2004. He is presently responsible for the development of new and sustainability of current commercial non-metallic products for Hoerbiger Compression Technology worldwide. Dr. Bremner is also Co-Director of the APPEAL Research Consortium on high performance polymers at Texas A&M University, and is a TEES Research Engineer with A&M in the Department of Mechanical Engineering.

Chris O'Brien

Partner, Exida Consulting

Mr. O'Brien has over 25 years' experience in the design, manufacturing and marketing of process automation, reserve power systems, and safety related equipment. He focuses on supporting new and existing customers with their implementation of the IEC 61508 and IEC 61511 functional safety standards as well as reliability analysis for mechanical devices. He was formerly Vice President of the Power Systems Business Unit of C&D Technologies. Prior to that, he was with Moore Products/Siemens Energy and Automation where he held several positions including General Manager of the Instrumentation Division.

Chris is the author of Final Elements and the IEC 61508 and IEC 61511 Functional Safety Standards and has been awarded 5 patents, including a patent of the industry's first safety rated pressure transmitter. He has a Bachelor of Mechanical Engineering from Villanova University.

planet hollywood

Las Vegas, Nevada



Hotel Reservations

Accommodations for the 2014 VMA Technical Seminar and Exhibition have been arranged at the discounted conference rate of **\$169** at Planet Hollywood in Las Vegas.

To make reservations please access the link on the VMA website located on the homepage of the Technical Seminar & Exhibition at **www.vma.org**.

Or you can call the Reservation Center at **1-866-317-1829** to secure a reservation in the group block. The name of the group is Valve Manufacturers Association of America or you may also refer to the group code **SMVAL4** when making reservations.

Registration Fees and Policies

Attendee registration is open to all. Registration fees are \$595 for the first registration and \$495 for any additional registrations from the same company. Your registration fee includes the VMA Technical Sessions and Technical Manual that accompanies the presentations, continental breakfasts, breaks, lunch, and Welcome Reception as well as access to the exhibit area.

Hoover Dam Tour tickets can be purchased at time of registration for \$65. Your tour fee includes transportation to and from the tour and a boxed lunch.

Spouse/Guest registration is also available for \$75 which includes the Hoover Dam Tour on March 5th and Welcome Reception on March 6th

Technical Seminar Registration Cancellation Policies

Cancellations received up to 30 days before the event are refundable, minus a 5% registration service charge.

Cancellations received between 15 and 29 days before the event are 75% refundable.

Due to hotel and other event guarantees, cancellations received between 0 and 14 days prior to the event the day are non-refundable. This amount may be used toward a future meeting within 12 months. All cancellations must be in writing to mmaloneblevins@vma.org.

Questions?

Contact Malena Malone-Blevins, Meetings Manager, at 202.331.8105, ext. 310 or mmaloneblevins@vma.org.



TECHNICAL Seminar & Exhibition



2014 Registration Form

Please copy this form for **each** Spouse/Guest Registration or Additional Registrant. Complete information is needed for each registrant type.

Fees

\$595

First Registrant

Includes technical seminar, exhibit area admittance, as well as all food events. Does not include tour.

\$495

Additional Registrant

Must have prior full-price registrant from same company. Includes technical seminar, exhibit area admittance, as well as all food events. Does not include tour.

\$75

Spouse/Guest Registration

This registration includes Tour of Hoover Dam and admittance to Welcome Reception ONLY. Does not include admittance into technical seminar or other food events.

\$65

Hoover Dam "Inside and Out" Tour

March 5th (see brochure schedule for details) This ticket includes your transportation to Hoover Dam and a boxed lunch.

Technical Seminar Registration Cancellation Policies

Cancellations received up to 30 days before the event are refundable, minus a 5% registration service charge.

Cancellations received between 15 and 29 days before the event are 75% refundable.

Due to hotel and other event guarantees, cancellations received between 0 and 14 days prior to the event the day are non-refundable. This amount may be used toward a future meeting within 12 months. All cancellations must be in writing to mmaloneblevins@vma.org.

Name _____

Name for Badge _____

Title _____

Company _____

E-mail _____

Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____

Registration Fees

| | Fee | Quantity | Total |
|-----------------------|-------|----------|-------|
| First Registrant | \$595 | | |
| Additional Registrant | \$495 | | |
| Spouse/Guest | \$75 | | |
| Hoover Dam Tour | \$65 | | |
| Total | | | |

Payment by check

\$ _____ representing _____ registration(s)

Payment by Credit card

VISA MasterCard Discover American Express

Amount to charge \$ _____

Card Number _____ Exp. Date _____

Security Number _____ Billing Zip Code _____

Name on Card _____

Signature _____

4 Ways to Register

Online

www.vma.org

Email form to

mmaloneblevins@vma.org

Facsimile

202/296-0378

Mail

VMA
1050 17th Street, NW
Suite 280
Washington, DC 20036