



FINAL SPEAKER PRESENTATIONS

The following presentations are available in the 2010 Spring Convention Proceedings package.

To purchase, contact Malinda Armstrong at Malinda.Armstrong@ascouncil.org or (301) 986-9700 ext. 106.

Monday, April 19, 2010

Opening General Session: The Recovery—How Long and How Fast

Beaulieu, Alan

One of the most informed and respected economists in the country will discuss short- and long-term economic forecasts for the U.S. and abroad and how they will affect your company.

Fundamentals of Formulation I

Rheological Study of Fumed Silica Suspensions in DGEBA Resin

Conn, Rodney

With increased use of epoxy and related resins in adhesives and composites, the choice of thixotropic agent and resulting rheological behavior has become more important. Learn about a study in which various grades of fumed silica were examined for their rheological properties in standard diglycidyl ether of bisphenol-A (DGEBA) epoxy resin.

New Smart Silanes Specialties to Improve Significantly the Properties of Adhesives & Sealants

Sanchez-Morillo, Ramon

New demands for reducing VOC and improving performance have challenged the silanes providers to find new products. Learn about the development of a new silane specialty that addresses current market requirements. Other silane specialties with high functionality, which are necessary to improve the mechanical properties of adhesives and sealant formulations, will also be discussed.

Better Business Operations: Environment, Safety & Disaster Recovery

Environmental Compliance & Sustainability

Seguljic, Thomas

This presentation includes information on the development and implementation of environmental compliance programs, sustainability principles and how to integrate sustainability into your environmental compliance program.

Understanding and Controlling Dust Explosion Hazards: Compliance with the OSHA Combustible Dust National Emphasis Program

Ebadat, Vahid

Practical techniques for both preventing dust explosions and protecting people and facilities from their effects are presented, along with a systematic approach to dust explosion hazard assessment directed towards obtaining a Basis of Safety for the process.

Advanced Adhesion Science I

Mineral Oil in Adhesive Formulated for Packaging Tape; Physical Properties and Adhesive Characteristics

Eriksson, Anna

This presentation looks at a study on the impact of different types of oils used in packaging tape adhesive formulations. Results show that the choice of oil has an impact on the adhesive performance and that it could be possible to further optimize the formulation by choosing the most suitable oil to a given adhesive system. Results from an evaluation of viscoelastic properties are also included.

Design and Development of Acrylic Emulsion Adhesives and PSAs that are People- and Environmentally-Friendly

Oda, Sumihisa and Lamb, Jeff

This presentation reports on various developments including VOC reduction by reducing residual monomers and limiting breakdown of monomer components, as well as technologies for emulsifying high softening point tackifiers for use in acrylic waterborne PSAs without the use of solvents.

Structural Adhesives with a High W/E Ratio

Wang, Xiaobin

This presentation explores how to use the W/E ratio, the ratio between the working time and exothermic peak time, to describe how a cure file of an adhesive is ideal. Challenges in designing structural adhesives with a high W/E ratio, general ideas on designing such structural adhesives, and examples of MMA-based structural adhesives with a high W/E ratio are also included.

Two-Component Polyurethane Adhesives Having Novel Properties **Mahdi, Syed and Tribelhorn, Ulrich**

This presentation examines a novel family of two-component polyurethane adhesives developed to address opportunities in the automotive industry that provides primerless adhesion to dissimilar substrates, offers substantially no changes in adhesive mechanical properties within usage temperature; is independent of service temperature; builds rapid adhesive strength; and possesses higher mechanical properties.

Advances in Sustainable Adhesives & Sealants

Evaluation of Green Strength and Shrinkage during the Cure Interval of One-Part RTV Adhesives & Sealants by Rheometry **Gordon, Glenn**

An experimental protocol is described that provided data that correlated with results obtained from the lap-joint test of an oxime-functional silicone glazing sealant, and a demonstration of the measurements of shrinkage in one dimension and of the tensile stress generated in oxime- and alkoxy-functional sealants confined in a static joint configuration.

Making Sustainable Construction a Reality: The Role of Silicone Technology **Peitz, Thomas**

This presentation examines the significant role silicones play in all phases of the sustainable building—including enabling design concepts, improving construction effectiveness, and reducing the overall operating costs of the structure throughout its lifecycle.

Overview of Industry Markets & New Opportunities

Overview of the U.S. Markets **Nick, David**

This presentation looks at the performance of the markets for adhesives and sealants in 2009 and what can be expected for 2010 and beyond. Also discussed are current and proposed government economic stimulus packages and what they may mean to our industry for both the short and long term.

Market Opportunity Mapping **Detiveaux, Scott**

This presentation highlights an effective methodology that successful companies within the adhesives and coatings industries are using to “map out” their core competencies relative to market needs and properly align them with changing customer requirements. It also offers an approach that companies can use to better understand the critical success factors for effectively positioning themselves to meet the ever changing needs of customers.

Advanced Adhesion Science II

Liquid Isoprene Rubber for UV Curing Application

Hirata, Kei

Learn about a unique polymerization and polymer modification technology that contains methacryloyl groups on a polyisoprene main chain and is curable by UV irradiation in the presence of a photoinitiator.

Optimizing a Nonwoven Bonding System Using SBCs in Adhesive Formulations

Esquivel De La Garza, Alejandro

This presentation examines the use of copolymers to formulate hot-melt adhesives. It also reviews their performance development in nonwoven bonding for parts assembly and bonding to other substrates, such as plastics or metal used as structural support.

Tuesday, April 20, 2010

Sealants in the Building Envelope

The Exterior Envelope: Weatherproofing Design Considerations

O'Connor, Thomas

This presentation explores the importance of a building's exterior envelope and weatherproofing design considerations including exterior water management systems; the importance of liquid water and water vapor management; how air barrier and vapor retarder systems utilize sealants at their interfaces; importance of transition details; and illustrations of common failures.

Sealant Tests

Klosowski, Jerry

This presentation addresses the weathering of sealants correlated to outdoor exposures and what is needed to know about durability; common factors within generic types of sealants; characteristics of several types of sealants; and how to make a sealant selection for given applications.

New Business Opportunities

Global Chemicals Consolidation: Successful Strategies for Adhesives and Sealants Companies

Blaige, Thomas

This presentation delivers proprietary information in the adhesive and sealant industry—one of the most active components of the chemicals sector. Stay up-to-date on current trends, understand the market and plan for the future, and explore major challenges that manufacturers and distributors are facing in 2010 (e.g., elevated and volatile raw materials costs, equipment and technology costs rising, tight credit markets). This presentation also

addresses consolidation drivers, M&A data, case studies of recent significant deals and an overall approach to maximizing value when considering strategic activity and/or transactions.

The Adhesive and Sealant Market Opportunity for Alternative Energy Methods

Nick, David

This presentation covers the use of adhesives and sealants for the fabrication and construction of alternative energy equipment—with specific focus on wind turbines and additional commentary on photovoltaics and other competing energy source technologies. Formulated products and their 2010-2015 USA demand outlook are also presented.

How to Translate the "Bio" Trend into Real Business Opportunity in Adhesives

Weernink, Jan

This presentation delves into details of the “real” opportunities for bio-chemicals, including categorizing the main demand drivers behind the green/bio trend; analyzing economically which market segments could potentially pay a premium for bio; presenting a methodology to define a market penetration strategy to capture the opportunities; and providing marketing tools to help define your own strategy with bio-based chemicals and adhesives.

Fundamentals of Formulation II

Innovative Methodologies for Hot Melt Adhesives Lay-Down Can Save Money, Time, and Create Customer Trust and Loyalty

Budai, Mike

In this presentation, the relationship between various hot-melt polymers (rheology, temperature, softening point, specific gravity, and viscosity) and the adhesive lay-down technologies available for their successful application is examined. To ensure a project's success, it is important to understand that adhesives and equipment should not be sold without first considering the entire project as a one turn-key solution for the customer.

New Silanes: Adhesion Promoters and Low VOC Primer

Huang, Misty

This presentation discusses silane structures that have not been previously used in adhesives and sealants that can help improve adhesion and deliver improved sealant properties. Additionally, silanes for low VOC primers for difficult organic substrates, including TPO, are explored.

Special Workshop for Manufacturers

The Distribution Channel—Developing a Long-Term Management Strategy

Huelskamp, Ray

Manufacturers learn how to more effectively understand whether distribution channels make sense for their companies. Also included is information on how to make channels more efficient and what tools and techniques can be used to quantify success levels.

Closing General Session: Effective Business Management

What Goes Into the Total Costing of Your Product?

Murad, Dan

Contact Mr. Murad directly for this presentation at dmurad@chemquest.com or (513) 469-7555.

Understanding the Profitability of Your Customer

Detiveaux, Scott

EXCLUDED PRESENTATIONS

At the speaker's request, the following presentations are not available for publication, and therefore, are not included in the 2010 Spring Convention Proceedings package.

Successful Recovery from a Disaster: Protecting Your Company's Essential Data

Clark, Mark

Social Media Revolution: Generating Value for Your Business

Kaufman, Ira and Stewart, Patsy

Carbon Nanotubes-based Gecko Inspired Adhesives

Dhinojwala, Ali

Winning on Value vs. Losing on Price—Competing Successfully in a “Me Too” Marketplace

Chase, Landy

Sealants in the Building Envelope

White, Christopher

Tools for Making Sound Investment Decisions

Orloff, John

Linking Process Improvement (Lean) Initiatives Directly to the Bottom Line through Lean Navigational Charts and Scorecards

Kirby, Philip