VINYL FORMULATORS ANNUAL CONFERENCE
Harrah's/Harvey's Lake Tahoe
Lake Tahoe, NV
July 17-19, 2005

Sunday, July 17, 2005

8:30 a.m.	Golf – Genoa Lakes Golf Club *Shuttle departs from Harrah's at 7:00 a.m.*
4:00 - 6:00 p.m.	Executive Committee Meeting *Emerald Bay*
6:00 - 7:30 p.m.	Supplier-Sponsored Reception Tabletop Displays *Sand Harbor II*

Monday, July 18, 2005

8:00 - 9:00 a.m.	Spouse Breakfast *Tahoe A*

GENERAL SESSION
Sand Harbor II

8:00 – 8:30 a.m.	Continental Breakfast
8:30 - 8:45 a.m.	Opening Remarks
8:45 – 9:15 a.m.	**Plasticizer Update** (Peter Schwab, BASF)

Peter Schwab *was born Feb. 10, 1966 in Wuerzburg, Germany. He is married to Birgit and has a 6 year old daughter, Nina. He has a PhD in "Organometallic Chemistry and Catalysis" in Germany, completed 1994, with postdoctoral R&D work at CALTECH (Prof. Grubbs), Pasadena, CA (1994-1995). Peter joined BASF in Sept. 1995 and spent 4.5 years in R&D and process development. In 2000, he became the Marketing Manager for Fuel Additives until 2003. He then became the leader of the Strategic Business Development Group in the BASF's Global Petrochemicals Division where he coordinated the acquisition of Sunoco Chemical's Plasticizer and Plasticizer Raw Material Business. In December 2003, Peter was delegated to the U.S to work in BASF's NAFTA Headquarters at Florham Park/New Jersey where he is currently the Business Manager for BASF Plasticizers in NAFTA and Coordinator for BASF's Investment Projects at Pasadena/Texas.*

9:15 – 10:00 a.m.	**High Performance Calcium/Zinc Stabilizer Systems for Flexible Vinyl: Expanding the Range of Applications** (Ben Labovitz, Halstab)

Traditionally calcium/zinc stabilizers have been perceived as offering inferior heat stability when compared to barium/zinc stabilizers. This has been particularly apparent in high shear and high heat applications. Halstab has developed calcium/zinc stabilizer systems that offer performance comparable to barium/zinc

stabilizers. In particular the combination of a Calcium/zinc powder with a liquid stabilizer can offer outstanding heat stability, color hold, low odor, and reduced volatility.

Ben Labovitz *is a graduate of the College of Wooster where he earned a BA degree in Chemistry. Ben's prior experience includes 6 years with OMG Americas. While employed with OMG, Ben was responsible for new product development in the PVC stabilizer group including scale-up and process development of metal carboxylate intermediates and PVC stabilizers.*

In 2001 Ben joined Halstab as a technical service chemist. Ben's responsibilities for Halstab are focused on the formulation and development of liquid and powder stabilizers for flexible PVC. Ben is currently the Manager- Technical Service and Product Development for Halstab.

10:00 – 10:30 a.m. BREAK

10:30 - 11:30 a.m. **Vinyl Industry Update/Green Building Issues** (Judith Nordgren, VI)

Judith Drew Nordgren *is Director of Industry Affairs Flexible Division for the Vinyl Institute, a national independent trade association representing the leading manufacturers of vinyl plastics. Prior to joining The Vinyl Institute, Judith worked as community relations representative for Borden Chemicals and Plastics. While at BCP, Judith started the annual ChemFriends Expo, led the first Habitat for Humanity build in Ascension Parish and helped facilitate the building of the Geismar Community Center.*

Before Borden, Judith worked for the American Cancer Society and where she launched the first Relay for Life event in the state. She served as president and a board member of the Ascension Parish Chamber of Commerce and was named the chamber's 2002 Women of the Year. She has a bachelor's degree in mass communications from Louisiana State University and a minor in political science.

Judith lives in Arlington, Virginia and has two wonderful college-aged children, Blair Elizabeth and Drew Eastman Nordgren.

11:30 - 1:00 p.m. LUNCH ON YOUR OWN

1:00 - 1:30 p.m. **European Resin Update** (Michel Tchapian, Solvin)

- 2004 Offer and demand
- European exports:
  - Historical trends
  - The Euro/Dollar issue
- European versus North American application & products portfolio
- Opportunities and Threats for European PVC for pastes industry
- Sustainability
  - PVC image update
  - "Vinyl 2010 progress report

Michel Tchapian *is French, 46 years old, married with 2 daughters and is a graduate of the "Ecole Nationale Supérieure d'Electricité et de Mécanique" in France where he earned an engineering degree. Hired by SOLVAY in 1981, he*

held plant management jobs for 15 years in Electrotechnical and Instrumentation. After a PED program at IMD (Lausanne, CH), he moved to business and became the European Business Manager for PVC Compounds . Michel is currently Business Manager Emulsion and Paste PVC for SOLVIN (Subsidiary of SOLVAY for PVC) based in Brussels, Belgium.

1:30 - 2:30 p.m. **RFCI Presentation** (Bill Hall)

2:30 - 3:00 p.m. BREAK

3:00 – 3:30 p.m. **Nano-Additives – A Smart Way to Improved Polymer Performances** (Dr. Thomas Sawitowski, BYK-Chemie)

Nanotechnology is the buzz word of the early 21st century. Along with expectations and promises first applications become commerialized especially in the field of nanocomposites. Using small ultrafine partilces new or/and enhanced properties can be achieved while maintaining clarity and gloss. Key applications areas in composites are currently scratch resistant clear coats as well as long lasting UV protection using inorganic nano fillers. These progresses along with a definition of nanotechnology will be presented by this paper.

Dr. Thomas Sawitowski *is a graduate of the University of Essen where he earned BS and MS degrees in Inorganic Chemistry and Materials Sciences. Thomas Sawitowski prior experience includes 12 years at DEGUSSA R&D for resins and paint additives by three years as managing director of a Nanotech start-up company AlCove Surfaces dealing with concepts of local drug release and nanostructured surfaces.*

In 2003, Thomas Sawitowski joined BYK Chemie GmbH as Manager Nanotechnology Thomas Sawitowski's responsibilities for BYK Chemie GmbH are focused on R&D in Nanotechnology, technology scouting and marketing of NANO Additives.

3:30 – 4:15 p.m. **Application of Modern Laboratory Tools to PVC Processing and Performance Problems** (Paul Daniels, ExxonMobil)

Every material, no matter how useful and how reliable, occasionally has problems during its fabrication or during its service life. Modern laboratory technology provides powerful tools for resolving some of these problems. In this paper we examine four different types of test equipment used to characterize problems which have affected vinyl plastisols for decades. The first type of test equipment is surface analytical devices. This equipment makes it possible to study thin surface layers and very small surface areas. The second type of test equipment is dynamic mechanical testing equipment. With this equipment it is often possible to characterize plastisol gelation and fusion under actual manufacturing plant processing conditions. The next type of equipment is FT spectroscopic devices. With these instruments it may be possible, among other things, to track down reasons why a vinyl product has discolored. Finally, there is accelerated weathering testing equipment. These devices can be used to compare relative outdoor weathering performance of different materials. Of course, none of these types of instruments provide definitive answers to every problem but all can be very useful tools in flexible PVC problem sleuthing.

Paul Daniels *received his bachelor's degree from Miami University in Ohio and his M.S. and Ph.D. degrees in organic chemistry from the University of Louisville. He has worked for ExxonMobil Chemical Company for the past 25 years. He currently works as a member of ExxonMobil's plasticizer technical service group at the company's polymer research facility in Baytown, Texas.*

5:30 – 6:30 p.m. Reception – Casino Night with Complimentary Gaming Instruction
Valhalla 1 & 2

Dinner on your own

Tuesday, July 18, 2005

8:00 - 9:00 a.m.	Spouse Breakfast *Tahoe D*

GENERAL SESSION
Sand Harbor II

8:00 – 8:30 a.m. Continental Breakfast

8:30 - 9:00 a.m. **Filler Basics for Plastisols** (Pat Wernett, Specialty Minerals)

Author: Joann C. Foster – Specialty Minerals Inc.

The importance of mineral fillers in vinyl plastisol formulation has been long established. With the proper selection of mineral filler type and grade, the filler can go beyond the function of resin extender to provide an improvement over base resin properties. This presentation provides an overview of mineral filler properties important to their use in resin modification. The specific attributes of the common fillers used in vinyl plastisol formulation and their specific functionality will also be discussed.

Author bio: ***Joann C. Foster*** is a graduate of the University of Delaware where she earned a BS degree in Chemistry and Lehigh University where she earned an MBA in Marketing. Joann has been employed with Specialty Minerals Inc.(SMI) for 11 years. In her current position of Technical Manager she is responsible for the research & development, applications, and technical support for SMI's products for the sealant and consumer products industries.

Presenter bio: ***Pat Wernett*** *has been with Specialty Minerals for 13 years. His primary responsibility has been in the area of New Product Development-improving the properties of mineral-based functional fillers in organic matrices; especially in plastics and paper. He has a B.S. in Chemistry, West Chester University (Pennsylvania), a Ph.D. in Physical Organic Chemistry from Lehigh University, and a Post Doctoral Associate in Thermodynamic Studies at Duke University.*

9:00 - 9:30 a.m. **Color Theory** (Steve Foos, American Color)

For some people, working with color can be more art than science. An understanding of color theory can take the mystery out of color. This presentation

will discuss basic color theory such as the requirements for color, interaction of light, measurement, assessment, and terminology. To the casual color observer this will provide the essentials for a basic understanding of color and a foundation for further study.

Steve Foos *is a graduate of Terra Community College with an AAS degree in Coloring of Plastics and Bowling Green State University with a BS in Advanced Technological Education. His work experience includes thermoplastic color matching with Allied Color Industries, development of PVC automotive interior films with Uniroyal Engineered Products, and presently as Manager of Research & Development at American Colors, Inc. He is responsible for the design and scale up of liquid pigment dispersions for coating, plastic, and adhesive applications.*

9:30 – 10:00 a.m. BREAK

10:00 – 11:00 a.m. **North American Resin Update** (Armin Vaihinger, PolyOne)

Armin F. Vaihinger *is the Sales and Marketing Manager for PolyOne's Specialty Resin Group.*

Armin's career with BFGoodrich, The Geon Company and subsequently PolyOne started in 1976, when he graduated from Lehigh University with a B.S. in Chemical Engineering. Prior to his current position, Armin's 29 year career at PolyOne has included assignments in the areas of Safety and Environmental Engineering, Resin Manufacturing, International Licensing, International Sales and Marketing. During this time, he obtained his MBA in Finance and Marketing, from Case Western Reserve University.

Over the last 13 years, Armin has been an integral component in the US and Canadian sales and marketing programs for the Geon Specialty Resin product line, which has led to his current role.

New Jersey is home for Armin, where he lives with his wife Chris and their four children, who are in various stages of "leaving the nest".

11:00 – 11:15 a.m. Division Business Meeting

11:15 – 11:45 a.m. **SPI Update** (William Carteaux, SPI)

SPI President ***Bill Carteaux*** *began his tenure at the association in March 2005. He came to SPI from Demag Plastics Group Corp., where he was named president and chief executive officer in 2002. Based in the Cleveland area, Demag Plastics Group Corp. is one of the nation's top two manufacturers of injection molding machines for the plastics industry. Carteaux previously served as the company's vice president of sales and marketing.*

Prior to joining Demag, Carteaux spent eight years with a manufacturer of vertical injection molding machines, including four years as its president. He has been actively involved in numerous leadership roles with SPI for more than 10 years, serving on the Machinery Board and as Vice Chair, then Chair of SPI's Equipment Council. While a member, Carteaux also served as vice chair of SPI's Strategic Management Group for Industry Growth and Development, and chair of

both the NPE finance committee and the NPE operations committee. He's been active in standards development and on SPI's Finance, Administration and Membership Committee.

Prior to accepting his post as president, Bill was slated to serve as vice chairman of SPI's Executive Board for the 2005 term. He has an MBA from Indiana Wesleyan University and a BS from Purdue, where, in 1998, he was the first recipient of the Outstanding Alumnus Award from the University's Agricultural and Biological Engineering Department.

11:45 – 1:00 p.m. LUNCH ON YOUR OWN

1:00 - 1:30 p.m. **Asian Vinyl Market** (Leo Chyou, Formosa)

1. PVC Paste Resin Supply/Demand Balance in Asia
   - Major export countries: Korea, Taiwan, Japan, Thailand, and Malaysia.
   - Major import countries: China, India, Indonesia, Philippines.

2. China PVC Paste Resin Major Manufacturers' Production Capacities
   - Estimated in 2005 total 295 KMT annually.
   - Majority by carbide process.

3. PVC Paste Resin Demand in Asia by Application in 2004
   - Used in leather, glove, automotive, toy, floor, and others.
   - Total demand 709 KMT, 4% growth rate compared with 2003.
   - 40% of world demand

Leo Chyou *is a graduate of the National Taiwan Institute of Technology where he earned BS degree in Industrial Management. Leo's prior experience includes 24 years with the Formosa Plastics Corporation, USA followed by five years with Formosa Plastics Corporation. While employed with the Formosa Plastics Corporation, USA, Leo was responsible for the management analysis and intermediates business. More recently, Leo was responsible for business analysis and feedstock procurement.*

1:30 – 2:00 p.m. **Phthalate Esther Panel** (David Yopak, Teknor-Apex Co.)

David F. Yopak *has been the Director of Regulatory Affairs for all Divisions of Teknor Apex Company since 1998. David has worked in the plastic industry for over 25 years, with experience in a broad array of plastic processing areas, including electroplated plastics, coated engineered films, decorative finishes for costume jewelry, engineered resin compounding and fabrication, to his currently responsibilities within all of Teknor's divisions. In the spring of 2000, David also became responsible for managing the Regulatory Department of Teknor Apex. This addition integrated the responsibilities for both raw materials / facility wide EHS compliance and product regulatory compliance (FDA, medical clearance, etc). David is also Teknor's representative on the Phthalate Esters Panel (PEP) of the American Chemistry Council (ACC), where he is currently co-chair of the Communications Task Group. David also represents Teknor's interests in several other state and national organizations.*

David has a Bachelor of Science degree from the University of Long Island in Environmental Science and has completed additional course requirements toward an MBA at Bryant College.

2:00 - 2:30 p.m. BREAK

2:30 - 3:00 p.m. **Mechanical Foaming: Process and Applications** (Don Berlin, Oakes Corporation)

Mechanical Foaming is the process where a liquid main component as well as secondary components can be mixed and then foamed to a desired density. There are no chemical blowing agents needed and thereby eliminating any environmental concerns.

The process of mechanical foaming will be discussed. This will include the equipment needed to foam a wide array of products, including plastisols. Particular attention will be spent on the special requirements needed to foam plastisols.

Don Berlin *is a graduate of Washington and Lee University where he earned his degree in Psychology Don has worked in the chemical and adhesive industry for over 20 years and has been with E.T. Oakes Corporation for five years. During that time he has introduced the concept of mechanical foaming into a wide range of markets and has become a recognized expert in the field of mechanical foaming. His article in Adhesive and Sealants magazine last year on adhesive foaming was well received and he is working on other technical articles for publication. Don is currently the Sales Manager for E.T. Oakes Corporation.*

3:00 - 4:00 p.m. **Commercial Technical Session**

- **The Global Dispersion Business from a European Prospective** (James Allman, EVC)

  A review of the global dispersion resin business looking at supply/demand both now and in the future and key external drivers that will determine it.

- **An Alternative to DEHP in Plasticized PVC** (Jim Cooper, Eastman)

  A two year cancer study has recently been completed using rodents to validate the long-term safety of Di-2-ethylhexyl terephthalate (DEHT). There was no evidence of liver cancer, pancreatic cancer or any other cancer tumors and there were no effects on testes which is in contrast to results observed in similar studies with some ortho-phthalate plasticizers. This presentation will review the results of the DEHT toxicity testing, provide an overview of the physical properties of DEHT, and the performance of DEHT in PVC applications.

6:30 - 9:30 p.m. Reception/Dinner – **Party Blackjack with Buffet: Tour of Italy, Taste of Asia and Southwest Adventure**
Sand Harbor II and III

Guests will be welcomed to dinner with chips to try their luck in this "wacky" tournament. Some guests will be "celebrity dealers" while others will win a prize for the first blackjack. Some may win a prize, just because! The top three guests with the most money at the end of this event will receive fun prizes. Or, we may even award the person who loses the most with a prize!

Wednesday, July 20, 2005

7:00 – 11:00 a.m. Technical Committee Meeting
Glenbrook