



## Introduction to Pressuresensitive/Self-adhesive Technology Workshop 2013

November 4-5, 2013 - Amsterdam, The Netherlands In cooperation with Chemsultants International

Sponsored by:





Interactive, hands-on technical workshop and career training

Attended by representatives from R&D, Quality Control & Assurance, Engineering, Sales and Marketing

## **Workshop Outline**

The Pressure-sensitive/Self-adhesive Technology workshop is designed to introduce participants to the basics of self-adhesive products, including their design, manufacture and end-use. The target audience are professionals involved with marketing, research, technical support, quality control and production, that may be new to the self-adhesive industry, and those professionals needing a primer on the technical aspects of self-adhesive products. To support understanding of the market and the technical background for self-adhesives, a broad range of topics from market trends to "why self-adhesives work" will be covered.

This introductory workshop explains many topics to a basic level of understanding, making it ideal for participants new to the pressure-sensitve/self-adhesive world. The program includes the topics to be covered along with a description of the content of each one. Furthermore, a "glossary of terms" will be reviewed during the course to help participants understand the language of the self-adhesive industry.

In the end, this workshop should provide the essential knowledge and information in design, manufacture, testing and end-use performance of the self-adhesives used in the tape and label industry.



Corey M.Reardon, President & CEO, AWA Alexander Watson Associates

"The market for self-adhesive (pressure sensitive) products has become extremely competitive and continues to be driven from the demand-side by brand owners, OEM's, producers of products utilizing self-adhesive technology, and retail channels, who are leveraging their purchasing power, and often substituting alternative technologies depending on cost, product positioning, environmental issues, and marketing or production objectives. The self-adhesive industry has evolved over the years to become highly developed, diversified, and competitive. In less than 70 years, the self-adhesive industry, driven by label, tape, and industrial applications has developed and matured and is today served by hundreds of supplier companies and thousands of converter companies worldwide."

## **Workshop Leaders**



Dave McCann, Director of Research and Development

"The workshop provides insight into actual testing, giving close-up views of the equipment and procedures used in release liner sample preparation and testing".

Dave McCann obtained a B.S. in Chemical Engineering at University of Dayton, 1980. His first position was in product development/commercialization for extrusion and injection molding ABS and PVC compounds in static dissipation, along with some work in electrolytic separation membranes. After that, he spent 24 years in pressur- sensitive adhesives base materials – label and tape base stock and emulsion PSA's and coatings – for labels, tapes and outdoor/digitally printed graphics. Early part of his career was spent mostly in process engineering (coating PSA's and silicones) and quality assurance.

Most of the last 20 years was spent in support of customers through technical service and new application development, helping them solve problems and helping them choose the right product for their application. His current position is Director of Research and Development at Chemsultants in Mentor, Ohio, USA. This position manages a laboratory responsible for contract research and development, problem solving, physical and analytical testing.



Tom Besselman, Director of Coating Operations

Tom Besselman received his B.S. in Paper Science Engineering and his B.A. in Chemistry at Miami of Ohio in 1981. His first position was in R&D as a development chemist developing thermal transfer and impact transfer inks. He has been named as co-inventor on several patents on these formulations.

After 10 years, he started on paper coatings that was essential in developing the encapsulated leuco dyes that form an image in color copying or carbonless business forms. Besides that he has been on the manufacturing side of the business. He worked for Avery Dennison as a process engineer/manager working with retro-reflective sheeting and label lay-flat.

He has been with Chemsultants in Mentor Ohio since 2002. His experience at Chemsultants utilizes both the R&D and Production background. He is managing the pilot coating end of the business which includes customer interface, quoting and problem solving.

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### Program Monday, November 4th

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08:00 - 09:00	Registration & Welcome Coffee
09:00 - 09:15	Workshop Opening & Welcome
09:15 - 09:30	Chemsultants International Capabilities Overview  Description of Chemsultants capabilities in testing equipment, product development, physical and analytical testing, problem solving, training and education, pilot coating and contract manufacturing.
09:30 - 10:00	Self-Adhesive Market Overview  Presentation, based on AWA research, on trends in the Self-Adhesives market with respect to products, market drivers, growth and regional characteristcs and developments. Market characteristics, trends and developments worldwide will be discussed, putting workshop topics into a market context.
10:00 - 10:45	What makes Self-Adhesives Work? Covers the chemical and mechanical properties of self-adhesives (also known as pressure-sensitive adhesives) and why these are important in gaining and maintaining their unique properties that allow adhesion to surfaces. The basics of adhesion, polymer properties and how they allow self - adhesive materials to work is discussed.
10:45 - 11:15	Coffee & Networking Break
11:15 - 12:00	Pressure-sensitive Adhesives Product Types This section goes over the various types of self-adhesive products, components used to make them, their end-uses and markets they serve.
12:00 - 12:45	<b>Types of PS Adhesives</b> Covers the different adhesive classifications (permanent, removable, etc.), their polymer base (rubber, acrylic, etc.), applications where they are used and how they are provided to the manufacturer (solvent based, 100% solids, etc.)
12:45 - 13:45	Lunch
13:45 - 14:30	Pressure-sensitive Adhesives Compounding - Solvent Systems This section reviews the basic formulation and compounding of solvent based adhesives including natural rubber, synthetic rubber, acrylics and silicones.
14:30 - 15:15	Pressure-sensitive Adhesives Compounding - Hot melt Formulations This section covers basics on hot melt adhesives, components used, formulation and compounding. Focus is primarily on styrenic block copolymer (SBC) formulations.
15:15 - 15:45	Coffee & Networking Break
15:45 - 16:30	Pressure-sensitive Adhesives Compounding - Water based Adhesives Covers basic formulation and compounding of water based systems, including synthetic rubber, acrylics and natural rubber.
16:30 - 17:00	<b>UV Curing Technology</b> This section covers UV and EB curing mechanisms, the basic chemistry involved, components and basic formulation and curing equipment.
17:00 - 18:30	Cocktail Reception & Networking

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## Program Tuesday, November 5<sup>th</sup>

08:00 - 08:30	Morning Coffee
08:30 - 09:15	Face & Carrier Webstocks Reviews the materials used for facestocks (printed surface) in self adhesive labels and the materials used as carriers (middle layer used for support or strengthening) in double coated tape products.
09:15 - 10:00	Release Systems and Release Liners  This section covers release coatings and liners used in self adhesive tapes and labels to protect the adhesive and transport the product through processing and storage. Focus is on silicone release coatings, covering basics of why they work, chemistry, formulation and end-uses.
10:00 - 10:30	Analytical Testing Applications for PSA Products  This section reviews analytical methods used to characterize the chemical make up and physical properties of self adhesive materials. Case studies are presented to show how these methods can be used to diagnose the cause of problems encountered in manufacture, converting and end-use.
10:30 - 11:00	Coffee & Networking Break
11:00 - 12:30	Physical and Release Testing of PSAs Covers methods, equipment and standards for evaluating properties such as peel adhesion, tack, cohesive strength and release from liner for self adhesive tape and label products.
12:30 - 13:30	Lunch
13:30 - 15:15	Pressure-sensitive Adhesives Coating Methods Reviews the various methods of applying self adhesives onto moving webs of liners and carriers. Included are equipment descriptions, basics of operation, where each is used, strengths and weaknesses. Methods covered include gravure, smooth roll, wire wound rod, slot die, etc.
15:15 - 15:45	Coffee & Networking Break
15:45 - 16:30	Convection & RF Drying  This section covers the basics of drying solvent and emulsion coatings in web processes. The presentation covers basics of drying, types of drying equipment, strengths and weaknesses and applications for each method. In addition to convection (heated air) drying, RF and IR methods are discussed.

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16:30 - 16:45



**Closing Remarks** 







#### Venue

Hotel Casa 400 Eerste Ringdijkstraat 4 1097 BC Amsterdam The Netherlands

Telephone: +31 (0)20 665 11 71

#### Hotel

Hotel accommodation is not included in the workshop registration fee and is the responsibility of individual participants. Please make reservations by calling +31 (0)20 665 11 71 and mention that you will be attending this event in order to get the special room rate.

#### **Special Room Rate**

Single/Double Occupancy: EUR 139,- / EUR 149,- \* Inclusive of breakfast, VAT and excluding 5.5% local taxes.

Casa 400 Hotel offers a special room rate to workshop participants for bookings made before September 19th, 2013 (available on a first-come, first-served basis). Reservations can be made by calling +31 (0) 206651171.

Mention your participation in the workshop to receive the special room rate.

Please see the Hotel Casa 400 website for the terms and conditions.

#### **Terms & Conditions**

#### **Workshop Fee**

The registration fee includes workshop attendance, lunch, coffee breaks, cocktail reception and workshop manual. Registrations may be limited and will be accepted on a first-come, first-served basis.

#### **Payment**

The workshop fee must be paid to confirm registration. To pay by bank transfer, please use the bank information provided below. AMEX, Eurocard/MasterCard and VISA are accepted. Make checks payable to AWA Conferences & Events.

#### **Cancellation Policy**

Submit a cancellation in writing or by fax to AWA Conferences. You may cancel your registration for a 75% refund from the date of registration until 30 working days prior to the conference. Cancellations received between 29 and 0 working days prior to the conference will not receive a refund. If you can not attend, you may designate an alternative attendee from your company by contacting AWA Conferences. Registrants who fail to attend or cancel between the 29 and 0 workings days prior to the conference are liable for the entire fee. No warranties for changes are expressed or implied. AWA Conferences reserves the right to cancel an event and commits to inform the registrant no later than 29 working days prior to the event. In this case only the registration fee will be refunded.

# Registration Form Introduction to Pressuresensitive/Self-adhesive Technology Workshop 2013

November 4-5, 2013 Amsterdam, The Netherlands

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