



4-5th October 2017, Alicante, Spain

<http://www.pigmentmarkets.com/pigment-color-science-forum>

Day One – Wednesday 4th October 2017

08.00	Registration and Welcome Refreshments
09.00	Chairman's Opening Remarks
Conference Session One: Pigment Industry Update (Plenary Session)	
09.15	<p><i>A global pigment industry overview</i></p> <ul style="list-style-type: none"> • Presentation summary TBA <p>Reg Adams, CEO, Artikol</p>
09.45	<p><i>Consolidation key note – Moving forward</i></p> <ul style="list-style-type: none"> • Explaining the advantages of combining Tronox TiO₂ business with the Cristal TiO₂ business. • Covering the synergies identified by this acquisition and the benefits to the industry and TiO₂ customers. • Describing how the new Tronox TiO₂ business will look and what the priorities will be. <p>Jean-Francois Turgeon, Executive Vice President, Tronox</p>
10.15	<p><i>Paints & Coatings: Identifying market drivers</i></p> <ul style="list-style-type: none"> • Presentation summary TBA <p>Bill Eibon, Director, PPG</p>
10.45 - 11.15 Networking Refreshments Break	
Conference Session Two: Colour Trends & Perceptions - From Market to Consumer	
11.15	<p><i>Challenges in the colour-emotion space</i></p> <ul style="list-style-type: none"> • A profound understanding of the interaction between colour, human perception and emotional response, calls for a multi-disciplinary approach. • This talk describes what scientific knowledge we have to date and the challenges facing scientists, wishing to quantify what determines human colour preference. <p>Trevor Sayer, Managing Consultant, Expertas Global</p>
11.45	<p><i>Ten things you should know about perception</i></p> <ul style="list-style-type: none"> • Human visual perception is incredibly complex, but powerful • Any industry dealing with visual appearance necessarily confronts aspects of human vision • Many existing challenges can be formulated as specific perceptual research questions <p>Roland W. Fleming, Professor, University of Giessen, Germany</p>
12.15	<p><i>The evolution of red styling</i></p> <ul style="list-style-type: none"> • The desire to create eye catching and novel red colors have posed a variety of technical and coloristic challenges. • Reds have traditionally posed hiding and durability challenges for paint manufacturers. • Meanwhile designers seek new levels of saturation and novel effects in modern thin film paint systems. • This presentation will touch upon historic pigment innovations and current tools to meet the various aesthetic and technical challenges within the red color space <p>Javier Morcillo Ruiz, Coatings Industry Manager, BASF</p>
12.40 - 14.00 Networking Lunch	

Conference Session Three: Advances in Colour Science

14.00 *Living sparkle – physics and perception*

- The present talk starts with the demonstration of sparkling textures as obtained by different effect pigments based on alumina (“Xirallic®”). Here we have a certain range of static parameters as apparent number, size, color and intensity of sparkling points, which can be properly estimated from paint and pigment properties. This is proofed by a 3D flake simulation and its comparison to real samples
- Further studies on the appearance of video sequences is analyzed, which are taken from the samples under moving direct illumination. Thereby the goal is to document and quantify the dynamic behavior of the sparkle points as “apparent movement (living sparkle)” and find out the applicability of the Korte’s rules in terms of pigment and paint properties as well as observation conditions.

Kirsten Fritsche, Director Performance Materials, Merck

14.30 *Infusion of dyes in polymeric beads for cosmetic colors*

- Today, the production of innovative cosmetic colors registers a high customer demand in a fast-moving market. The impregnation process of polymeric beads with dye using supercritical carbon dioxide constitutes one attractive answer.
- The technical challenge lies here in the achievement of non-deformed beads, while displaying non-bleeding properties in various liquid media. The infusion of dye into a commonly used polymer system such as a partially crosslinked polymethyl methacrylate beads fulfills these success criteria. New bio-sourced polymeric bead alternatives are also examined.

Aurelie Cruzeze-Morel, Senior R&D Manager, Sensient Cosmetic Technologies

15.00 *Spectrofotocolorimetry - How lighting affects colorimetry and how it is really measured*

- Throughout the presentation, we will assess the spectrophotometry experiment parameters applied in the industry, going into the science of pigmentation of colours and the influence of light on them.
- We will analyse the fundamental parameters that characterize the spectrophotometry: CRI, TlCI, GAI, SDCM, CIE1931, CIE1976, Check Colour, Transmittance, reflexion, Smart Filter etc.
- Practically we will assess the behaviours of spectrum, optics, filters, phosphors that affect the perception of colours.

Alfredo Blasco Navarro, CEO, LED Y SPA.

Fernando Barrachina Vázquez, Industrial Engineer, AsenseTEK

15.30 - 16.00 Networking Refreshments Break

Conference Session Four: Exploring Innovations across Applications

16.00 *Printing Inks used in applications securing the industry*

- Presentation summary TBA

Lisa Clapp, Vice President of Colors Technology, Sun Chemical

16.30 *Green carbon black pigments for coatings and tires*

- Discusses the properties of recovered carbon black from end-of-life tyres
- The presentation will also describe the positive environmental impacts of using Black Bear products compared to furnace and gas blacks.
- Will look into the benefits that recovered carbon black can provide for these segments over virgin carbon black.

Chris Twigg, CTO, Black Bear Carbon

17.00 *Tinctures craftsmanship of the European tapestry and carpet masters from the renaissance to modern age*

- The renaissance marked a creative chapter in Europe with the discovery of a new continent, the invention of printing and the flowering of art and culture.
- New pigments were now available to artisans and craftspeople, redefining the aesthetic of textiles, rugs and tapestry.
- Weavers and dyers from trading centers in Italy, Spain, Flanders and France developed secret color formulas, competing on a large scale and creating a wealth that changed the face of commerce.

Nathalie Roy, Color, Materials & Finishes Designer

17.45 -19.00 Networking Drink Reception

Day Two – Thursday 5th October 2017

8.30	Registration & Welcome Refreshments
8.55	Chairman's Opening Remarks
Conference Session Five: Pigment Properties –Enhancing Performance	
09.00	<p>Latest engineering developments in dispersion machinery</p> <ul style="list-style-type: none"> • Presentation summary TBA <p>Norbet Kern, Head of Product Management & Process Engineering, Bühler AG</p>
09.30	<p>Effect coatings appearance acquisition and analysis</p> <ul style="list-style-type: none"> • Photorealistic effect coatings appearance capture and visualization • Particle orientation analysis and quality assessment using reflectance and texture information • Development of novel effect coatings appearance measurement approaches <p>Jiri Filip, Senior Researcher, UTIA - Institute of Information Theory and Automation</p>
10.00	<p>New ultra-thin effect pigments</p> <ul style="list-style-type: none"> • Pearlescent effect pigments play an important role when it comes to high end decoration. But especially in the yellow and red color range there is still a need for pigments with good hiding power which can be used safely. • Based on a novel technology using an ultra-thin substrate it is possible for the first time to produce pigments with outstanding hiding power and no safety risks. • The possible color range goes from yellow to red. Particle orientation analysis and quality assessment using reflectance and texture information <p>Adalbert Huber, Vice President R&D, Schlenk Metallic Pigments GmbH</p>
10.30 - 11.00 Networking Refreshments Break	
Conference Session Six: Novel Opportunities across the Value Chain	
11.00	<p>Natural pigments in lipsticks</p> <ul style="list-style-type: none"> • In recent years, consumers' demands are shifting the markets toward more natural option as alternatives to synthetic colorants. • When it comes to lipstick, long-wear and shade are the key focus and main challenge for the formulation with natural ingredients. • The aim of this talk is to describe what the options and limitations on the market for natural pigments in lipstick are. <p>Clara Le Berre, Senior Technology Chemist, Colour Cosmetic, Oriflame</p>
11.30	<p>Tinting systems for non-obvious markets</p> <ul style="list-style-type: none"> • Chromaflo is a market leader in tinting systems for the decorative and industrial coatings industry. This is a matured market as these tinting systems are nowadays state of the art in almost every DIY shop. • As a consequence, Chromaflo explores opportunities for implementing these systems in adjacent markets. • Based on several case studies, the opportunities and challenges of using a tinting system in these new markets will be described. <p>Ron van der Leeuw, Sales Manager Thermosets - EMEA, Chromaflo</p>
12.00	<p>Effect of physical characteristics of aluminum pigments on color and appearance</p> <ul style="list-style-type: none"> • Multiple parts on an automobile can be sprayed using various application methods. Color achieved in a metallic coating is highly dependent on the orientation of the metallic flakes. • Orientation of the aluminum flakes will be different depending on the application method...therefore, difficulties arise when trying to achieve color harmony with metallic colors.

<ul style="list-style-type: none"> This presentation will investigate critical factors of aluminum pigments and review their effect of Color (L Value/Sparkle/Graininess) when trying to match air spray and Bell applications. <p>Jason Kuhla, Manager, Technical Service and Product Applications, Silberline</p>
12.30-13.45 Networking Lunch
Conference Recap (Joint Session)
<p>13.45 TiO2 World Summit Recap 13.55 Pigment & Colour Science Forum Recap Reg Adams, CEO, Artikol Bill Eibon, Director, PPG</p>
Conference Session Seven: End Market Innovations (Joint Session)
<p>14.05 Automotive: Pigment & colour developments <ul style="list-style-type: none"> Presentation summary TBA Speaker TBC</p>
<p>14.35 Pigments & regulatory dynamic in masterbatch <ul style="list-style-type: none"> Value creation from pigment to masterbatch. Coloristic complexity in the flow of increasing awareness in requirement of property and regulatory. The idea is to highlight the complexity and the value bringing of masterbatch. Combining different pigments to reach the right shade, in combination with additives and pigments limitation to be used in different polymer systems. In combination with this, we would like to highlight the further limitation we have when we also bring in the factor of regulatory demands and REACH. Magnus Thörnqvist, Strategic Evaluation Specialist CPC EMEA, A. Schulman, Inc</p>
<p>15.05 Natural pigments in cosmetics <ul style="list-style-type: none"> Cosmetic industry is at the forefront of B2C consumer trends; besides the digital revolution leading to absolute changes in the market, the other megatrend of the XXIst century is the quest for harmless, sustainable and natural products. Both risk and opportunities are quite high for color cosmetic formulae's ingredients. We will see how L'Oréal as the market leader addresses this challenge, and see how the pigment industry could shape the future, for higher value and better social and environmental impact. Colin Godefroy, International Raw Material Manager for Color, L'Oréal Research and Innovation</p>
15.35 - 16.05 Networking Refreshments Break
<p>16.05 Building a bridge between FMCG and pigments producers to ensure the purity of Danone's products <ul style="list-style-type: none"> Collaborating across the value chain by exchanging info Fighting NIAS Preserving the promise of purity Philippe Reutenauer , Additives, Colorants, Barriers & Diferentiation Manager, Danone Nutricia Research</p>
<p>16.35 Consumer Awareness & Safety of Pigments <ul style="list-style-type: none"> Presentation summary TBA Pierfrancesco Fois , Deputy Executive Director, ETAD</p>
17.05 Chair's Conference Summary and Closing Remarks
17.15 End of Conference