“The wide range of speakers and topics covered the entire value chain of this industry in high detail, making the summit a very efficient way to stay up to date as the titanium dioxide industry continues its rapid rate of change!”
Director, Global Color Technology Platform, PPG Industries

“Excellent opportunity to meet many pigment companies and network”
President, Van Horn, Metz & Co.
Company Profile

Dedicated to Unique pigments technology.
Provides professional pigments service.

Shanghai Yipin Pigments Co., the predecessor of which was the Shanghai iron oxide pigment factory founded in 1931, has 83 years of history. It is the president of China Iron Oxide Pigment Industrial Association. Yipin Pigments is the high-tech enterprises in Shanghai City. It is committed to promoting technological progress of iron oxide pigment industry in China and all of the world.

Yipin Colorant is a division of Shanghai Yipin Pigments, which specially supply safe pigments. It is committed to provide tailor made color solutions to the global pharmaceutical, food, cosmetics industrial and enhance customer value by the professional research.

With many years of research and inspection method, we know well the production technology and testing technology of the security pigments. Now we can provide professional service in the field of security pigment.
Welcome to Montreal, Canada and to our conference TiO2 World Summit 2014 and our Pigment and Color Science Forum 2014. These conferences provide an opportunity to network with customers and suppliers and learn about the various views and perceptions of the industry from many perspectives. However, it also brings together competitors in various markets, product lines and geographical regions. Because of this, conferences such as this can be the subject of close scrutiny by antitrust and competition law enforcement agencies. While we have some control over the content of formal presentations, we cannot control informal conversations that occur before, during or after the formal presentations have concluded, nor can we regulate conversations during breaks or at cocktails/dinner, etcetera. For this reason, we feel it is prudent to remind our attendees at the outset of this conference that EU competition laws, US antitrust laws, and other national and local laws are applicable to the conduct that takes place at this conference. Each participant is responsible for their own conduct to ensure that they do not participate in any inappropriate conversations or exchanges of written or electronic material that would violate the antitrust and competition laws. The areas that could be deemed inappropriate discussion topics between or among competitors are discussions about current, pending or future pricing. This includes discussions about rebates, discounts, terms of sale or credit terms. It is inappropriate to discuss upcoming bids for business, allocation of customers, markets or regions. It is inappropriate to discuss capacity or rationalization thereof. It is inappropriate to discuss the possible boycott of a customer or supplier. It is inappropriate to discuss any plans or intent to dominate a market or to take joint action against a particular entity.

The presenters at these conferences are sensitive to these issues and have crafted their presentations accordingly, but we need to be mindful of the appropriateness of our questions and answers that follow each presentation so as not to give the appearance of delving into any of the issues mentioned above. Antitrust and competition law enforcement is very active. We can conduct this conference in a meaningful, legal way so that the participants get the most out of their attendance, but at the same time keep communications within appropriate boundaries.

Thank you for your attention to these details and have a great conference!

John Lewinski, Head of US Events
Smithers

CONFERENCE STAFF

Andrew T. Smaha – Conference Director
Andrew manages a conference portfolio that includes materials such as Tire Technology, Elastomers, Carbon Black, Pigments, TiO2 and Metallurgical Coke. For these sectors and others, Andrew researches industry trends and new developments, identifies and recruits an active Advisory Board of industry experts, solidifies conference dates and locations, then begins the process of designing and executing the conference program. As Conference Director, Andrew’s role is to continually evaluate program developments, reshape topics to accurately reflect new data, attract and confirm the most appropriate speakers and provide logistical support to industry leaders and presenters. Throughout the process, Andrew develops partnerships with industry associations and agencies, all while properly positioning and communicating the event for our delegate audience.

Laura Preston – Senior Conference Manager
Laura handles all of the logistics for the conference before, during and after. She will be delighted to hear your suggestions for improvements, and answer any questions you may have over the course of the event. You may email her at lpreston@smithers.com.

Danielle Marks – Marketing Manager
Danielle Marks is Marketing Manager for Smithers events and membership. She is responsible for marketing and media for a broad range of industry events. Danielle would be delighted to hear your comments and suggestions for marketing future events, or how to improve this one. Post conference she can be reached via email at dmarks@smithers.com.

If you have any other queries, the Smithers event team will be available at the registration desk to help you.

This compilation of presentations is the property of Smithers Information. All rights reserved. No part of these may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic mechanical, photocopying, recording, or otherwise, without the prior written permission of Smithers Information.

Smithers Information is not responsible for the use which might be made of the information.

No responsibility is assumed by Smithers Information for any injury and/or damage to persons property as a matter of products liability, negligence or otherwise, or from any use of operation of any methods, products, instructions or ideas contained in the material herein.
WELCOME
Welcome to Montreal and the Pigment & Color Science Forum and TiO2 World Summit. We are pleased you are here.

Combining more than 25 years of experience in working with the industrial pigments and colorants and titanium dioxide industries, we are pleased to deliver two stellar programs this week. The 2014 editions of these events and their joint exhibition hall will feature international leaders who will be updating attendees on the latest opportunities and challenges facing us all.

By colocating the Pigment and Color Science Forum and the TiO2 World Summit, we have been able to secure the highest caliber of presenters ever for both programs; there will be several joint sessions where all of the key stakeholders in both industries will join together to discuss pressing issues, plus sessions dedicated exclusively to pigment markets or the TiO2 industry. Additionally, all of the networking events will be combined allowing the business executives, R&D leaders, academics, government policy makers, stakeholders, and investors that make up the key audience for both events even more opportunities to build strategic relationships and greater access to thought leaders across the pigment supply chain.

Smithers Rapra created The Pigment and Color Science Forum to unite the pigment industry behind color science and design. The Forum attracts a high degree of industry experts including academics involved in pigments, research entities, color designers, major pigment manufacturers, industrial standards officers, pigment tooling/measuring/consistency companies, and buyers in the areas of plastics, paint and coatings, cosmetics, paper and printing inks.

Similarly, the TiO2 World Summit is our 14th conference devoted to TiO2 market health drivers, new mineral projects, industry profitability, sustainability and zero waste, feedstock supply and demand, and both widespread and specialty applications. Going strong since 1990, the biennial TiO2 World Summit continues to attract an influential international audience of titanium dioxide decision makers.

We are keenly aware that you have options on where to turn for business contacts and the latest trends, and therefore labor over the program in order to strike the perfect balance between new faces and familiar, technology and market, R&D and end product.

Copies of presentations can be found on the conference USBs, which are distributed at the registration desk. Following the conference, we will email a web link with full color, updated versions of the presentations available for download.

Enclosed in this pack is an evaluation form that we kindly ask you to complete and return to us at the end of the conference. If there are issues that we can immediately attend to, please alert our staff.

Delegate Lists
A full list of attendees is included in the delegate pack given to you at registration. If you have trouble getting in touch with a specific attendee after the event, contact the Smithers office and we will be happy to facilitate contact, if possible. We can be reached at 207-781-9800.

Meals, Breaks and Receptions
We will provide a continental breakfast, lunch, and refreshment breaks during the course of the conference. Networking reception provides a wonderful opportunity to meet speakers and fellow delegates and to discuss the days' proceedings. Times for all meals are given in the agenda.

Speakers
Speakers for this event were selected through extensive research and recommendations from the Advisory Board.

Conference Proceedings
A link containing the final versions of all presentations will be sent to you after the conference. If you do not receive this link within 7 business days, please contact us at 207-781-9800, as we may not have a current e-mail address for you.

Badges
Please wear your badge at all times, both for security and networking purposes. Our conference badges are made of PLA.

Questions
We encourage delegates to ask questions of speakers throughout the conference. There will be a question and answer time periodically throughout the conference. When asking a question, stating your name and company name before asking your question will help the speaker tailor their answer to your specific interest.

Recording
Parts of this conference may be recorded by Organizers (audio, video, photography) for publicity purposes. Other participants are only allowed to make recordings with the permission of the Conference Organizers.

Valuables/Security
Smithers cannot take responsibility for any valuables, conference booklets or notes left in the conference room or registration area. Please do not leave any possessions (particularly your computer) or baggage unattended at any time. Our staff is often away from the registration area attending to details, so this area must not be considered "secure". On the day you check out, please store your luggage with the hotel, and not in the back of the room.

Cell Phones
Out of politeness to our speakers and other delegates, please ensure that your cell phones are turned off or silenced for the duration of each conference session. If you need to take a call, please step out of the conference room.
Tuesday, October 7, 2014 – Conference Day 1

Pre-Conference Workshops – By invitation only

8:00 Workshop and General Session Registration Open

9:00 Workshop I: Characterization of Non-Pearlescent Pigments Industry Collaboration Project
This session will assist in identifying ways companies in the pigment industry can break down barriers and work towards the common good of the industry. Topics include how the industry can collaborate to consolidate the testing process, how to uniformly characterize pigments, what tools exist that can be modified/advanced to better incorporate customer feedback in the early stages of development.

12:00 Workshop Concludes

Joint Session I: State of the Pigments and TiO2 Industry
In this session, delegates will hear the latest industry developments with overviews in the pigment and pigment intermediates market, notes on emerging regulatory issues, and investment perspectives on the global pigments industry and focus on TiO2, organic and inorganic pigments.

12:45 Welcome and General Session Opening Remarks
Andrew T. Smaha, Conference Director, SMITHERS RAPRA, USA

1:00 State of the Pigments and TiO2 Industry
Bill Eibon, Director - Global Color Technology Platform, PPG Industries, USA

1:30 The Future of High Performance and Specialty Pigments
• A review of the present status of the High Performance and Effect Pigments global market
• Specialty pigments and their markets and future growth potential
• Impact of environmental and legislative pressures
• Innovation and technology trends in the future
Dr. Trevor Sayer, Managing Director, EXPERTAS LTD, UK

2:00 An Overview of the Regulatory Framework: Opportunities & Challenges
Dr. John Bailey, former Director, Office of Cosmetics and Colors, U.S. FOOD AND DRUG ADMINISTRATION and Senior Advisor, EAS CONSULTING GROUP, LLC, USA

2:30 Future Innovations in the Pigments & TiO2 Industry
Dr. Parfait Jean Marie Likibi, Director, Global New Market Development at HENKEL ADHESIVE TECHNOLOGIES, USA

3:00 Networking Break and Refreshments in the Exhibit Area

3:30 EU and BRIC Economic Outlook & Impact on Paints, Pigments, Plastics and Commodity Chemicals
Reg Adams, Managing Director, ARTIKOL, UK

3:45 The Future of High Performance and Specialty Pigments
Dr. Parfait Jean Marie Likibi, Director, Global New Market Development at HENKEL ADHESIVE TECHNOLOGIES, USA

4:00 Asian Economic Development and Trends in the Asian Pigment & Color Industry
• The major Asian economies: economic trends and market hotspots
• The Asian pigment & color industry: development and changes
• How changes in the major Asian economies will affect production and trading in the pigment & color industry
• Opportunities in the Asian pigment & color industry
• Marketing strategy trends in the Asian pigment & color industry
Wu Zhonghui, Founder and Managing Director, CCM AND KCOMBER INC, China

4:30 Pulver-Industrial Coatings & Plastics, BASF, USA

5:00 Special Announcement: BASF Launches Pigments Emerging Professional Network with Smithers Rapra
Mike Crosby, Transportation Segment Manager, Transportation, Industrial Coatings & Plastics, BASF, USA

5:15 Welcome Reception

The Benefits of Membership
Smithers Rapra Plastics, Pigments and Additives Members receive 3 registrations to The Pigment and Color Science Forum 2014/TiO2 2014 and other Rapra Pigments and Additives events!

Not sure if you're a member or want more information about the many benefits of membership, including access to e-books, online publications, personalized research assistance for your packaging questions and more?

Contact Brian Santos at bsantos@smithers.com or +1 207 781 9618 and he’ll be in touch shortly!

BASF Emerging Professional Scholarship
BASF - the world’s leading chemical company - is committed to creating ‘chemistry for a sustainable future’ and has been doing so for 150 years. For those of us who work in the pigment industry, a sustainable future must include ensuring that emerging professionals in our field have access to a full complement of tools that will further their careers AND our industry as a whole. Smithers Rapra and BASF are excited to announce a new initiative - The BASF Emerging Professional Scholarship - to provide just this type of resource for professionals who are looking for growth.

Courtesy of the generosity of BASF, we have more than 10 emerging professionals here in attendance at the 2014 Pigment and Color Science Forum to share their perspectives. This is a true signifier of the level of commitment that BASF has to the future of the pigments industry!

This is only the beginning. Over the course of this next year, BASF and Smithers Rapra will be launching further initiatives devoted to the health and growth of the pigments industry.

For more information, visit www.pigmentmarkets.com
8:00  Continental Breakfast in the Exhibit Area  
Sponsored by Malvern Instruments

8:45  Day #2 Opening Remarks  
Andrew T. Smaha, Conference Director, Smithers Rapra, USA

9:00  Session Keynote: The Future Of Ti-Pure is Bright!  
• Investments enabling growth  
• Focus on Customers  
• Innovation  
• Ti-Pure brand image  

Peter O’Sullivan, Global Sales Leader, DUPONT Titanium Technologies, USA

9:30  An Industrial Minerals Overview of TiO2  
• TiO2 existing supply  
• Demand drivers and trends in the market  
• New developments and newcomers  
• Outlook for the industry  

Kasia Patel, Reporter, INDUSTRIAL MINERALS, UK

10:00  The Global Scramble to Secure Feedstock Supply  
• World primary aluminium market outlook  
• Calcined petroleum coke market demand  
• Calcined petroleum coke market supply  
• Risks of the calcined petroleum coke market outlook  

Terece Muir, Editor Carbon Products Market Outlook and Carbon Products Monitor, Aluminium Raw Materials Team, CRU ANALYSIS, UK

10:30  Networking Break in the Exhibit Area  
Sponsored by Hatch

11:00  Natural Rutile – A Scarce Resource  
• The pipeline of growth opportunities  
• The role SRL plays in the global high grade TiO2 feedstock sector  

Derek Folmer, Chief Marketing Officer, SIERRA RUTILE LIMITED, Sierra Leone

11:30  Global TiO2 Pigment Industry Overview  
Reg Adams, Chief Executive, Artikal Ltd., UK

12:00  Networking Lunch and Exhibit Hours  
Sponsored by Fednav International Ltd.
Wednesday, October 8, 2014 – Conference Day 2 - CONCURRENT PRESENTATIONS

TiO2 World Summit Session IV:
TiO2 Supplier Perspectives & Major Global Project Updates
Each year, we take a deeper dive into the economics, prospects, new developments, research and other updates on regional projects. We go by geography, uncovering news and noteworthy projects under development, and the opportunities & lessons learned of each along the path to commercialization.

1:30 TiO2 Feedstocks – The New Normal
- Why mining costs have increased substantially in last 5 years
- Why market prices have landed at a step change level above historic levels
- Mineral Sands producers unwilling to sustain operations below operational economics
- Cyclical upturn now occurring
- How Iluka is preparing itself to supply our key customers with feedstocks

Robert C. Gibney, General Manager TiO2 Sales, ILUKA RESOURCES, INC., USA

Vaccum Metalized Flake Pigments
- Inks and paints that utilize vacuum metalized aluminum pigments are gaining greater acceptance and popularity
- Overview of the conventional process
- Introducing a disruptive process for producing vacuum metalized aluminum pigment.
- Unique properties that allows the pigment to be used with a wide range of ink and paint chemistries and environments

Dr. Angelo Viallizis, CEO, SIGMA TECHNOLOGIES INTERNATIONAL, USA

2:00 China TiO2 Industry: A Look Ahead Part I & II (60 mins)
- China TiO2 operations: cost, quality and quantity
- China Ilmenite operation: cost, quality, quantity
- TiO2 Import & Export: price trends, capacity & capacity utilization, investments
- Chinese industry strengths and weaknesses
- What is the role China TiO2 will play in the foreseen future?

Laurence Wang, Senior Consultant, CHINA TITANIUM CONSULTING, China

More than meets the eye: Cameras for Capturing BRDF Patterns
- The "Texcam" texture camera uses curved parabolic mirrors can capture multiview images instantaneously
- Real world materials can be characterized and recognized using BRDFs
- Algorithms for high-dimensional pattern recognition and machine learning can be used for material recognition
- How do optical properties of individual effect pigments influence the visible textures of coatings?

Dr. Kirsten Fritsche, Director Technology Application Network Decoratives Europe, MERCK KGaA, Germany

2:30 Networking Break in the Exhibit Area

3:00 Tronox Fairbreeze Mine: Local Partnerships – Global Reach
Jean-Francois Turgeon, Senior Vice President, TRONOx, USA

Glass Flakes as an Emerging Class of Effect Pigments
- Differentiation of glass flakes to other non-metallic pigments – commonalities and differences
- Glass flakes – process and properties
- Spectacular, measurable effects

Dr. Andrea Fetz, ECKART GmbH, Germany

3:30 Challenges and Successful Strategies in TiO2 Major Projects
Mr. Andrea De Mori, Global Director, Titania Slag, PiGM and Borates, HATCH, Canada

Capturing the Perceptual Quality of Coatings:
The Quantitative Measurement of Color
- Perceived Quality: Defined
- Engineering Methodologies: Capturing the Customer's Emotional Reaction
- The Instrumental Measurement of Paint Quality Metrics
- Objective Instrumental Measurement: Color Harmony of Automotive Coatings

Dr. Linda J. Gerhardt, Global Paint Quality Lead, GENERAL MOTORS, USA

4:00 Investing in New TiO2 R&D in the New Reality
Lorenzo Bonome, Principal Consultant &
Gerry Colamarino, Managing Director,
TIPMC Solutions LLC, USA

The Measurement, Characterization, and Modeling of Aluminum Flake Containing Colors
- The measurement of the orientation and microstructure of the flakes using laser scanning confocal microscopy, SEM, and optical microscopy
- Methods of microstructural characterization based on microscopy measurements
- Development of a ray tracing simulation of the full flake containing system
- Results of simulations that quantified the effects of microstructural changes due to flake thickness, size, loading, and orientation

Christopher M. Seubert, Research Engineer, FORD MOTOR COMPANY

4:30 Networking Break in the Exhibit Area
Wednesday, October 8, 2014 – Conference Day 2 - CONCURRENT PRESENTATIONS

5:00 Evening Keynote: Argex Technology, the Greenest and Economic Process Toward a High Quality Titanium Dioxide Pigment
- AT process gives a TiO2 purity beyond 99.8%
- The greenest TiO2 process with the lowest carbon footprint
- The lowest operating cost process compare to other TiO2 processes
- The RCG Series pigment are well designed above the standard quality pigment
Jerzy Paszkudzki, Technical Advisor, Solid / Gas Separation TiO2 Industry, Toward a High Quality Titanium Dioxide Pigment

5:30 Networking Reception | Sponsored by: Argex Titanium Inc., Canada

Thursday, October 8, 2014 – Conference Day 2 - CONCURRENT PRESENTATIONS

9:00 Fast Spectral Reflectance and Spectral BRDF Measurements of Cosmetic Foundations and their Components
- Innovative Fourier optics instruments to measure the spectral BRDF of such surfaces within minutes instead of hours
- Focus on light diffusers included inside foundations and their impact of the optical properties
- Special attention is given to their backscattering properties in relation to their morphology
- Foundation aspects under various illumination conditions are deduced and compared
P. BOHER, T. LEROUx, L. CAVÉ, L. BLAIN, V. BOULIER, Dr. Pierre Boher, R&D Applications Director, ELDIM, France

9:25 Non-Conventional Filtration Elements for High Temperature Separation of TiO2 Pigments
- Post micronising pigment/steam separation process
- Conventional Filtration Bags - Key Limitations
- Why non-conventional elements are not widely used in TiO2 industry yet?
- Summary of benefits by implementing pleated elements

9:50 Method Preparation and Properties of Inorganic Powders Coated by Biocompatible Phospholipid Polymer
- Inorganic powder nanoparticles were coated by biocompatible poly(2-methacryloyloxyethyl phosphorylcholine) (PMPC) polymer using grafting technique
- A system consisting of MgCO3 and tetraborate groups was introduced in order to initiate the free radical polymerization, which resulted in the formation of PMPC-grafted powder
- TEM analysis revealed that the powder nanoparticles were completely coated by the polymer
- The advanced dispersion and the enhanced skin feeling of the PMPC-treated powder can be advantageous in the development of novel base material for cosmetic face makeup applications
Young-Jun Yang, Principal Researcher, AMOREPACIFIC Co. Ltd, Korea

10:00 Standardization of High-Reflective Mirror Like Finishes
- Standardisation: Obstacles & prerequisites
- What to measure: Factors, scales & terminology
- Results: Status quo & next steps
Dr. Frank J. Maile, Director Coatings & Colorants, SCHLENK, Germany

11:00 Environmentally Friendly Nano Iron Oxide Process
- Coal, Sulfur & Iron – An unlikely combination.
- Converting Acid-Mine Drainage to Iron-Oxide Pigment.
- EnvironOxides and how they compare to conventional Iron Oxides.
- Sustainability and Cleaning up pollution sources.
- Color Benefits of EnvironOxides
Charles Hoover, Jr., President/CEO, HOOVER COLOR CORPORATION

11:20 Automated Color Formulations: Strategies and Solutions for Metallic Coatings
Masayuki Osumi, President-Director, Office Color Science Co. Ltd., Japan

12:00 Day #4 Opening Remarks
Danielle Marks, Marketing Manager, Smithers Rapra, USA

5:30 Networking Reception | Sponsored by: Argex Titanium Inc., Canada
Thursday, October 8, 2014 – Conference Day 2 - CONCURRENT PRESENTATIONS

10:15  Networking Break in the Exhibit Area

10:45  Successful Use of FRP and Dual Laminates in TiO2 Processing
- Technical overview of Composite (FRP and Dual Laminates) materials of construction
- Selecting Composite materials for aggressive process environments required by TiO2 manufacturing
- A focus on Pipe System Design as a means to success in the use of Composite equipment in TiO2 processing
- Assuring a reliable installation and attaining the expected service life using Composite equipment
Robert Hawkins, President & CEO, RPS COMPOSITES INC., USA

10:45  Angle-independent Structural Colors Through Colloidal Assembly
- Angle-independent structural colors are well-known in nature;
- To achieve angle independence, it is important to have a disordered nanostructure
- We can make synthetic materials with angle-independent structural color
- These structural colors can be encapsulated in an easily dispersed form
- New research shows that it is possible to make even red structural colors this way
Vinodhan N. Manoharan, Gordon McKay Professor of Chemical Engineering and Professor of Physics, School of Engineering and Applied Sciences and Department of Physics, HARVARD UNIVERSITY, USA

11:10  Nano TiO2 Applications in Environmental Remediation
- Can nano TiO2 outperform the traditional pigment market in the near future?
- Nano TiO2 coatings for air purification
- Nano-TiO2 for water decontamination
- Nano TiO2 for soil depollution
- Newest developments in air quality control in EU and China and suitable TiO2 resources
Dr. Jan Prochazka, President, Advanced Materials- JTJ, Czech Republic

11:10  Color Science & How Design Perspectives, Fashion and Evolving Tastes
- Impact Annual Color Formulations in the Marketplace
  - Sharing a unique perspective of emerging Color Trends targeted for 2015
  - Our interpretation of how these trends are then translated into a unique color palette of specific recommendations for use in the personal care marketplace
  - The presentation will be an abbreviated review of our current Color Trends for 2015 Presentation as shared with a select group of Customers
Doug Thornley, President, IMPACT COLORS, USA

11:35  Networking Lunch and Exhibit Hours

Thursday, October 8, 2014 – Conference Day 2 - AFTERNOON SESSIONS

Joint Session VI: Global Pigment End Use Dynamics – a joint session of the TiO2 World Summit and Pigments & Color Science Forum
We travel industry by industry, addressing TiO2 and pigment market opportunities and new advances in plastics, cosmetics, paints & coatings, multifunctional pigments, industrial design, paper & printing inks, consumer electronics and automotive applications.

1:00  Accelerated Weathering Test Methods and Future Material Needs for Aerospace
- Exterior commercial airplane coating systems serve both decorative and protective functions so need to retain gloss and color properties as well as corrosion and fluid resistance when exposed to the environment at cruise altitude and on the ground.
- Strong economic and environmental pull to improve current exterior coating systems by doubling life from about 4 years to more than 8 years and provide multifunctional enhancements such as increased dirt, bug, and ice resistance.
- Need for improved accelerated artificial weathering protocols based on best capabilities of modern test chambers that reproduce the spectral power distribution and realistically balance UV radiation, temperature, and moisture levels and cycles.
- Evolution of the recently released specification ASTM D7869 “Standard Practice for Xenon Arc Exposure Test with Enhanced Light and Water Exposure for Transportation Coatings” and applicability to exterior aerospace coating development will be discussed.
Karen A. Schultz, Materials Engineer, Boeing Research & Technology, USA

1:30  Inorganic Pigment Regulatory Issues & The Case for True Scientific Evidence
- Dr. Mark Vincent, V.P. Sales Marketing and Technical, Dominion Colour Corporation, Canada and Ir. Leo van der Biessen, Senior Consultant Chemicals Management, ROYAL HASKONINGDHV, The Netherlands

2:00  The Transformation of the Specialty Chemicals Industry
- Dr. Mosongo Moukwa, Director of Technology, POLYONE, USA

2:30  Networking Break and Coffee

3:00  Pigment Market Opportunities and New Advancements in Plastics
Bruce A. Petersen, Chief Procurement Consultant, MATHELIN BAY ASSOCIATES LLC, USA

3:30  Pigment Market Opportunities and New Advancements in Building & Construction
Mark M. Ryan Jr., Marketing Manager, THE SHEPHERD COLOR CO., USA

4:00  Closing Keynote: Focus on the Canadian Pigment and TiO2 Industry
- Painting by numbers: Canadian coatings industry in context
- Key issues, challenges and concerns for coatings businesses in Canada
- A highly regulated sector of the Canadian economy now and in future
- Coping with regulations while growing a more prosperous business
Gary Lefrous, President & CEO, CANADIAN PAINT AND COATINGS ASSOCIATION, Canada

4:30  Conference Closing Remarks
Reg Adams – Chief Executive, Artikal Ltd, UK (Co-Chair)
Reg Adams is a graduate in Chemistry & Economics from Birmingham University. He began his career in London at Amalgamated Metal, as an economic analyst and was later seconded to English China Clays, where he wrote his thesis on company growth as part of an M.B.A. course at the Bristol/Bath University School of Management. He gained international recognition with his book “Titanium & Titanium Dioxide” commissioned by the “Financial Times” in 1984, which was followed up by the “World TiO2 Industry Review”, published by Chemical Matters and Fertecom in 1990. In collaboration with TZMI staff based in Australia, he compiled two multicientury studies, respectively published in October 1997 and May 2001. They are widely referred to within the industry as “The Green Books, Mach-1 and Mach-2”. On a monthly basis, Reg Adams compiles “Focus on Pigments” and formerly edited “Focus on Paper Chemicals”, two bulletins of embellished abstracts launched by the Royal Society of Chemistry (of Cambridge) during the 1990s and published by Elsevier since August 2001. He also writes for the widely acclaimed “TiO2 Worldwide Update” – a 75-25 joint venture between Artikal and IBAVI (of the United States). This independent bimonthly publication typically runs to 4060 pages and provides comprehensive coverage of all the industry’s news and developments, backed by detailed analysis and penetrating insight.

Roy Bonnell – President, CEO, Director & Co-Founder
A co-founder of Argex, Mr. Bonnell previously served as Vice-President, Corporate Development and Corporate Secretary from December 2009 to June 2011. He was also Managing Director of the Abwater Financial Group Inc. from June 2004 until December 2010. Mr. Bonnell holds a M.Sc. Accounting & Finance from the London School of Economics, an M.B.A. from McGill University, L.L.B. from Western Ontario and a B.A. from Queen’s University.

Frank J. Mitsch – Managing Director and Senior Analyst, Wells Fargo Securities, USA
Frank J. Mitsch joined Wells Fargo in May 2011 as a managing director and senior analyst based in New York. His coverage includes the commodity, specialty, and agricultural chemicals sectors. He joined Wells Fargo Securities from BB&T Capital Markets and has covered the chemicals space for more than 15 years. Mitsch began his career as a chemicals consultant with Kline & Company, an international management consulting firm, where he advised both US and European clients. Mr. Mitsch received his undergraduate degree in chemical engineering from the Stevens Institute of Technology, where he was a member of the record-setting lacrosse team. He holds an MBA with a concentration in finance from M.S.U.

Jean-François Turgeon – Executive Vice President, Tritonex Limited, USA
Jean-Francois Turgeon serves as Executive Vice President since joining Tritonex on January 1, 2014. He oversees the combined business operations of the company’s Mineral Sands and Pigment & Electrolytic Divisions. Turgeon brings decades of experience in leadership positions in the global titanium dioxide business. He joined Tritonex from the Rio Tinto Group, where he served for more than 24 years, most recently in London as managing director of its 5.3 billion ion and titanium division. In that role, he had oversight over international TiO2 operations in Canada, South Africa, and Madagascar, and regional sales offices in the Americas, Europe, Africa and the Middle East, and Asia and the Pacific. Previously, he held several executive, mining operations, and chemical research engineering positions in Rio Tinto’s titanium dioxide business unit. Turgeon holds a Bachelor of Science degree in chemical engineering from Universite Laval in Quebec City and a master’s degree in hydrometallurgy from McGill University in Montreal.

Laurence Wang, China Manager, Tinox Chemical LLC, China (Co-Chair)
Laurence Wang is a Titanium Industry Consultant, with a deep understanding of the Chinese Titanium industry. Laurence has provided consulting services to the top paint producers, TiO2 pigment producers, feedstock producers, paper and ink producers. Meanwhile, he works to help the western TiO2 industry to understand China Titanium industry. Prior to becoming an independent consultant, Laurence served as a China representative for TZMI from 2006-2010. He began his career as a Researcher for Pangang Titanium in 1991, where he worked in several positions obtaining vast knowledge about titanium feedstock, titanium slag, in situ and TiO2 Pigment on both production technologies and marketing. He then joined Sichuan Lomon Corp. as VG of international Business.

Dr. Isaac Cohen – Vice President, Corporate R&D Innovation, The Estee Lauder Companies Inc.
Isaac Cohen has over 20 years of experience in the Personal Care Industry. In his current role as Vice President, Corporate R&D Innovation, Dr. Cohen oversees the design and development of innovative color cosmetic, sunscreen and skin care products for the portfolio of Estee Lauder brands. His research on novel raw materials and cosmetic formulations is the subject of over 25 patents, pending applications and publications.

Paul Czornij – Technical Manager, Color Excellence Group, BASF (Co-Chair)
Z. P. Czornij joined BASF Corporation in Michigan in 1984 working in the research and development group for automotive OEM coatings, with a focus on coatings for plastic substrates. Later, he worked on various pigment projects for waterborne coatings. Since 1990, he has been involved in pigment evaluation and pigment dispersant resin development, responsible for the global colorant portfolio for the automotive OEM end use application. Currently he manages the BASF Color Excellence Group, with responsibility for pigment qualification, color science, paste process engineering, and color marketing and design. He is currently the president of the Detroit Colour Council. He received his chemistry degrees from Wayne State University and from the University of Detroit.

Bill Eibon – Director, Global Color Technology Platform, PPG Industries (Co-Chair)
Bill received his B.S. in Chemistry at Baldwin Wallace College in Ohio. He began his coatings career at PPG Industries in 1986, color matching metallic automotive paints and developing color master panels. He then spent four years developing & commercializing first waterborne Automotive basecoat system at PPG. Followed by seven years in Operations leading teams in Project management, Civil, Mechanical & Chemical Engineering, advanced equipment prototyping, and waterborne basecoat production. From there he spent four years as Global Manager, at Waterborne Basecoat Technology and was responsible for New Product Development Progress for waterborne coatings, polymers and intermediates. Immediately followed by three years as the Global Director Technology Transfer for PKAF LLC a joint venture between PPG Industries, Inc and Kansai Paints LLC.

Dr. Parfait Jean Marie Likibi – Director, Global New Market Development at Henkel Adhesive Technologies
Dr. Parfait Jean Marie Likibi, obtained his Bachelor of Science degree in Chemical Engineering in Rouen, France from l’Institut National Supérieur de Chimie Industrielle de Rouen. From France, he moved to Carbondale, Illinois USA where he received his Doctorate in Physical Organic Chemistry from Southern Illinois University. After his PhD, Dr. Likibi accepted a position with Sandia Chemical Corporation (Today’s Lawrence Livermore National Lab). After 3 years he was promoted to the position of Senior R&D Chemist. He then held various technical and business positions within GE Plastics before being appointed President of GE Africa. As a scientist at GE, Dr. Likibi worked on the interactions of pigments and polymers, monomers synthesis, polymers synthesis and polymers processing including molding and extrusion.

Dr. Trevor Sayer – Managing Director, Expertas Ltd.
Trevor obtained his Bachelor of Science and PhD degrees in Chemistry from the University of East Anglia in the U.K. He then carried out a 2 year Post Doctoral Fellowship in Synthetic Organic Chemistry at Georgia Tech. in Atlanta in the School of Chemistry. He returned to the U.K. in 1977 and joined ICI. Organics Division in Manchester as a synthetic organic chemist, developing new dyes and pigments, then after 5 years, became New Business Development Manager, developing a range of new specialty chemicals. Trevor moved to ICI. Paints in Slough and after a short time as New Business Development Manager in the Industrial Coatings Business, joined the Research Department to head up the Colour & Pigment Technology Group. Becoming a Senior Research Chemist in this group, Trevor had a strategic role to develop new pigment dispersant technology relevant to ICI Paints requirements in both the Decorative and Automotive Business Sectors and spearheaded the development of new polymeric pigment dispersants and associated colloid chemistry.

Dr. Max Subramanian – Milton Harris Professor of Materials Science, Oregon State University Materials Institute
Professor Max Subramanian received his Ph.D. degree (Materials Chemistry) in 1981 from Indian Institute of Technology, Madras, India. Subsequently he joined the research group of Professor Abraham Clearfield (Texas A&M University, USA) as a postdoctoral fellow. In 1984, he joined the Central R&D of DuPont Company (USA) as a research chemist and promoted to the level of Research Fellow in 2003. In 2005, he joined the Department of Chemistry, Oregon State University, USA as a Milton-Harris Professor of Materials Science and Signature Faculty Fellow, Oregon Nanoscience and Microtechnologies Institute (ONAMI). Subramanian research interest focus on the designing new inorganic solid state functional materials for emerging applications in electronics, solid-state energy conversion and other areas. He has authored over 250 publications and awarded 50 US patents. He is the editor of two international journals (Solid State Sciences and Progress in Solid State Chemistry) and a member of the editorial board in Journal of Solid State Chemistry and Materials Research Bulletin.
Gerry Colamurino is currently the Managing Director of TiPAC Solutions LLC, specializing in consulting activities within the TiO2 value chain, including feedstock, pigments, metals, and chemicals. He has over 20 years of international experience within the chemical, mining, and energy industries, having had multiple professional and leadership positions within DuPont Titanium Technologies, the world’s largest producer of titanium feedstocks and zircon, and Bloom Energy’s Strategic Materials organization. Gerry’s experiences include business management positions for DuPont’s Minerals, Titanium Intermediates, and Electrical Insulation Systems businesses. He has led multinational business development efforts, including the high growth DuPont Titanium Tetrachloride, expanding the business in 9 countries and including a landmark agreement with Allegheny Technologies, supplying TICIA to its Utah Titanium Sponge facility, as well as developing in over $300M of new revenues. As the Product Manager for Titanium for Iuka Resources, he led the program to create new products, optimizing existing resources and mineral processes, leading to two new products and millions USD new sales. He has led numerous strategic initiatives and studies, creating the business plan for Bloom Energy’s Strategic Materials, the roadmap and commercial structure for new beneficiation technology, and product development and launch for multiple businesses.

Stuart Croll – Professor and Chair, Coatings and Polymeric Materials, North Dakota State University, USA

Stuart Croll was with Millennium Inorganic Chemicals (now Cristal, TIOL) prior to NDSU. He gained a degree in physics from the University of London (UK), then completed a doctorate in polymer physics at the University of Cambridge (UK). He first worked in Oxford, England, then moved to the Division of Building Research in the National Research Council Canada. After several years in the construction chemicals and telecommunications industries, he moved into the coatings industry with Sherwin-Williams, where he worked on a wide range of R&D and troubleshooting projects, including coating film formation, rheology, weathering, adhesion, dispersion stability and polymer characterization. After spending over 20 years in industry, Dr. Croll joined the faculty at NDSU in 2000, and was the Chair of the department from 2006 until 2012. His current research interests include computer modelling and experimental approaches to understanding the durability of polymers and coatings (including art conservation) and adhesion.

Kristin J. Dana – Associate Professor, of Electrical and Computer Engineering, Rutgers University

Her research interests in computer vision include computational photography, machine learning, illumination modeling, texture and reflectance, motion estimation, optical devices, optimization in vision and applications of computational photography, machine learning, and computer vision. Dr. Dana is also the creator of the “texture camera” for convenient estimation algorithms for applications in defense, biomedicine and robotics. Dr. Dana is the inventor of the “texture camera” for convenient estimation, optical devices, optimization in vision and applications of computational photography, machine learning, and computer vision.

Dr. Linda Gerhardt – Global Quality Lead, Global General Materials, Covestro LLC

Dr. Gerhardt has been with General Motors over 20 years. She started her career with GM as a college intern in the paint lab at Chevrolet, Pontiac, General Motors of Canada (GMC) at the GM tech Center in Warren, MI. Since then, she has worked in Materials Engineering at CEC, the Polymers Department at GCA Research and Development, and in various groups of Global Paint and Polymers including Technology Development and Validation, Global Business Management, and Facilities, where she was the subject matter expert for paint/applicants. In her current role in the Strategy and Planning group of the Vehicle Systems Global Center, she is the Global Paint Quality Lead, where her responsibilities include paint quality, the
Robert Gibney - General Manager TiO2 Sales, Iluka Resources, Inc., USA

Robert Gibney is General Manager Titanium Dioxide (TiO2) Sales for Iluka Resources, based in Raleigh, North Carolina, USA. Gibney has over 25 years of pigment industry experience, having spent over 21 years with Tonox/Ken-McGee Chemical in a wide variety of management positions, including Vice President Global Pigment Marketing, Vice President Investor Relations and Corporate Affairs. Prior to joining Iluka, he was a Senior Vice President Global Supply Chain and Chief Administrative Officer. Having joined Iluka on February 1, 2014, Mr. Gibney is focused on developing Iluka’s TiO2 feedstock sales strategies along with increasing the TiO2 expertise within the company.

Philippe Guilmalaile – Head of Sales and Marketing, Argex Titanium Inc., Canada

Philippe Guilmalail is Director of Sales and marketing professional in the chemical industry. Mr. Guilmalail has held positions as sales manager for Fuji Film (Japan), Metalgesellschaft (Germany) and Monsanto/ Exxon Chemicals (US) among others. He most recently worked as Regional Business Manager, Europe and Africa for Kronos, a leading titanium dioxide producer, where he assumed responsibility of all markets, including coatings and inks as well as cosmetics, food and medical. His academic studies include a degree from the Lyon Institute of Technology, France.

Robert Hawkins - President & CEO, RPS Composites, Inc., USA

Mr. Hawkins assumed the role of President and CEO of RPS Composites in Jan. 2010, bringing with him tremendous experience in the FRP industry. He has been with RPS for 36 years. His work at RPS has included in production, estimating, sales, marketing, and engineering support. Mr. Hawkins has been an integral member of the senior management team at RPS for the past 18 years. Mr. Hawkins joined the production group at RPS in 1977, where he worked in pipe winding, assembly, small parts, and inventory control. His leadership abilities were quickly recognized. He was put in charge of various production units, and frequently sent to the field to instruct field crews in the proper installation of RPS piping systems. His travels took him frequently to the USA and as far afield as Japan. Mr. Hawkins was transferred to Aurora, CT in 1988, where he served as US. Technical Service Manager. He excelled in this capacity and demonstrated a strong aptitude for sales and engineering. This was recognized in 1990 when he was promoted to Canadian Sales Manager, based out of Kitchener, ON. His strong performance led to his appointment as Sales and Marketing Manager in 1993. In this role, he has led the growth of RPS in Europe, Asia, the USA and Canada. His leadership and technical competence is recognized throughout our industry, where he is a regular speaker at meetings of the power utility and chemical process industries. Mr. Hawkins is a Past Chairman of the National Association of Composite Engineers (NACE) Specific Technology Group Ten on Non Metallics, and was the 2007 Chairman of the NACE Composite Symposium.

Charles Hoover, Jr. - President/CEO, Hoover Color Corporation

Charles “Chuck” Hoover is a fourth generation “Colorman.” Growing up in the pigment business, Chuck was exposed to many aspects of the color industry from a very young age. By the time he entered university he had experience working in the labs, factories and natural Iron Oxide mines of the family business. His educational background includes a bachelor’s degree in Geology and a master’s degree in Business Administration. Like his grandfather (who invented the Hoover Automatic Muller), Chuck was concerned about color consistency and while managing the technical department at Hoover Color implemented one of the first colorists in the pigment industry. Over the course of his career he has managed all aspects of the business. His lifelong fascination with color and its history has allowed him to continue the search for better ways to make color.

Gary LeFloz – President and CEO, Canadian Paints and Coatings Association, Canada

As president of CPICA, Mr. LeFloz utilizes his more than two decades of professional experience to work collaboratively with CPCIA Board to identify and implement strategic initiatives and projects designed to ensure the ongoing relevance of the organization to both members and industry stakeholders. A recognized leader in association management for 15 years he has led associations to success on a number of important fronts. After his Masters Degree in Administration and several years in the federal government he gained extensive experience in the lobbying industry as a senior consultant spending ten years with Canada’s leading lobbying, before founding his own government relations firm with several partners. An expert in business management and government relations, Mr. LeFloz maintains a sharp focus on relevant industry issues related to general advocacy, government relations, education, stewardship, quantity management and membership. He has shown a commitment to ensuring that the programs and services delivered to CPICA members can help them meet realistic environmental goals set by governments while ensuring they can also deliver higher performing products that meet important business objectives.

Dr. Frank J. Maile – Director Coatings & Colorants, Schlenk, Germany

Dr. Frank J. Maile is director BU Coatings & Plastics at Schlenk Metallik Pigments GmbH in Roth, Germany and responsible for the global coatings & plastis business. After graduating in chemistry from the university of Stuttgart, Germany he worked at the research center for pigments and paints in Stuttgart (FP, e.V.) for his doctorate. Afterwards he joined the pigments division of Merck KGaA where he held several positions and joined Schlenk Metallik Pigments GmbH in 2011. Dr. Maile is Assistant Professor for Product Development & Design at Pforzheim University (Business School), Germany since 2010 and has published more than 30 papers. He frequently presents at international coatings and color science conferences.

Vinothan N. Manoharan – Gordon McKay Professor of Chemical Engineering and Professor of Physics, School of Engineering and Applied Sciences and Department of Physics, Harvard University, USA

Vinothan N. Manoharan is the Gordon McKay Professor of Chemical Engineering and Professor of Physics at Harvard University. His research focuses on understanding how systems containing many particles suspended in a liquid - such as nanoparticles, proteins, or cells - organize themselves into ordered structures like crystals, viruses, and even living tissues. His lab uses optical microscopy and holography to watch these systems self-assemble in real time. The goal is to discover new, general physical principles that underlie complex systems and to apply these principles to practical problems in materials science, nanotechnology, and medicine. Manoharan received his Ph.D. from the University of California, Santa Barbara in 2004 and worked as a postdoctoral researcher at the University of Pennsylvania before arriving at Harvard in 2005.

Dr. Mosgon Moukoua – Director or Technology, PolyOne, USA

Mosgon Moukoua is currently Vice President, Technology at Asian Paints Ltd., based in Mumbai, India. Prior to joining Asian Paints, he was Vice President, Technology at Reichhold, based in North Carolina, USA, and before that Vice President, Technology at Johnson Polymer (which is now part of BASF). He joined Asian Paints 5 years ago. Mosong Moukoua has a vast experience in the area of technology development and commercialization, and technology transfer. He is a regular contributor to Chemical World Magazine. Dr. Moukoua earned his Ph.D. Engineering, from the Universite de Sherbrooke, Quebec, Canada, and his M.E. from Western University, Cleveland, Ohio, USA. He is a member of the American Chemical Society and the Commercial Development and Management Association (PEMA).

Terece Muir - Editor Carbon Products Market Outlook and Carbon Products Monitor, Aluminium Raw Materials Team, CRU Analysis, UK

Terece joined CRU as a Consultant in 2008. Prior to joining CRU, she worked as a Chemical and Process Engineer for 6 years in the bauxite and alumina industry in Jamaica. Terece co-authors CRU periodical publications, including the Bauxite and Alumina Monitor; the Carbon Products Monitor; the Bauxite and Alumina Market Outlook, the Bauxite and Alumina Long Term Outlook, and the Carbon Products Market Outlook. Her focus is in the carbon products market centres on global calcined petroleum coke developments where she follows developments and trends in production, consumption and price discovery. Terece has also performed cost modelling and analysis for primary aluminium smelting costs, bauxite mining and alumina refining costs. Education: BSc (Hons) Chemical and Process Engineering, University of the West Indies.

Peter O’Sullivan – Global Sales Leader, DuPont Titanium Technologies, USA

Peter began his career with DuPont in 1984 in an accounting position in New York, DE. In 1991 Peter changed career direction by accepting an assignment in DTT’s Minerals Business as a salesperson/product manager. Over the next twelve years he held a series of assignments including TO2 sales in Texas, Marketing Services Manager for DTT, Business Manager for Mineral Products, and Global SAP Manager of Change. From 2002-2006 Peter was North America Sales Manager - Coatings. Peter was named Global Marketing Leader in March 2007. As Global Marketing Leader he organized an responsibility for price and market strategy, product and offering design and management, demand planning, competitive intelligence, branding and all additional functional marketing activities for DuPont Titanium Technologies. In December 2013 Peter was named Global Sales Leader - DTT. His global organization is accountable for establishing and executing key strategic initiatives at DTT’s largest key accounts around the world. Peter continues to be accountable for DTT’s global functional marketing organizations.

Masayuki Osumi – President/Executive Director, Office Color Science Co. Ltd., Japan

Masayuki Osumi started Office Color Science Co., Ltd in Japan in 2004 to develop a business about computer color matching systems for automotive coatings, especially metallic and pearlescent color. Since 2004, he has developed special color matching software called “HueView” for automotive coatings. Also he developed system with relation function with computer graphics such as 3-Dimension Visualizer and can be applied for all automotive color applications from Design to Production. During the past 10 years, he has held the position of technical consultant of Japanese automotive, paint, and digital equipment industries, and manages the color science association of Japan, association of color material etc., and ASTM E12. He received his polymer physics degrees from Tokyo University of Agriculture and Technology.


Born and educated in Poland. Gained B.Sc from technical University in Szczecin. Relocated with family to Australia in 1982. Spent whole working career in TiO2 industry, initially in ZCh Research Institute, and later at Sefar USA. Gained experience in solid/gas filtration stages of titanium dioxide industry.

Kasia Patel – Reporter, Industrial Minerals, UK

Kasia Patel has worked for Industrial Minerals since 2009 and has been Deputy Editor of the publication since 2014. She has specialised in filler minerals, fertiliser minerals and more recently, mineral sands such as titanium dioxide, zircon and rutile. Prior to Industrial Minerals, she worked for...
Metal Bulletin, also part of Euromoney, as part of the subscriptions and industry with Turkish REACH. In the last year he has been working on authorization requests and has been developing tools for efficiently information efficiently and spreading information in a timely manner a

Young-Jun Yang – Principal Researcher, AMOREPACIFIC Co., Ltd., Korea
Young-Jun Yang works with the Research Strategy(Make- up Research Division) at the AMOREPACIFIC R&D Center. He graduated with a Master's Degree from the Department of Chemical Engineering of Seoul National University in 2003. His work focuses on new paint curing technologies, including chemical modifications to lighten and harden surfaces, as well as finding new materials and techniques for dental applications. Young-Jun Yang has published several papers in international journals and has presented at several conferences.

Dr. Angelo Yializis – CEO, Sigma Technologies International, USA
Dr. Yializis is the founder and CEO of Sigma Technologies International, founded in 1992. Previously, Dr. Yializis held several research and managerial positions at GE and other companies. His expertise includes functionalization of material surfaces by treatment, growth and coating, nanoparticle production, nanoelectrodics, thin-film coatings for optical, electrical, electronic, food and medical packaging, ultrahigh vacuum techniques, and more. Dr. Yializis has received several patents and has contributed to several publications.
Argex Titanium Inc. has developed an advanced chemical process for the volume production of high grade titanium dioxide (TiO2) for use in high quality paint, plastics, cosmetics and other TiO2 applications. Argex’s unique proprietary process takes relatively inexpensive and plentiful source material from a variety of potential vendors, and produces TiO2 along with other valuable by-products. Argex’s process provides a significant cost and environmental advantage over current legacy TiO2 production methods. Argex’s primary near term goal is to rapidly advance toward a 50,000 tonne per annum production module; a first step in its goal to transform the 6.4 million tonne per annum TiO2 industry.

BASF - the world’s leading chemical company – is committed to creating ‘chemistry for a sustainable future’ and has been doing so for 150 years. For those of us who work in the pigment industry, a sustainable future must include ensuring that emerging professionals in our field have access to a full complement of tools that will further their careers AND our industry as a whole.

BYK BYK-Gardner USA is a member of the BYK Additives & Instruments division of ALTANA. BYK-Gardner is the manufacturer and distributor of quality control instruments. BYK-Gardner provides instrument solutions to measure solid, metallic, and liquid color; analyze gloss, haze, orange peel, & mottling; and test abrasion, adhesion, conductivity, density, dispersion, drying time, flexibility, film thickness, hardness, impact, temperature, and viscosity. Complete your lab with applicators, balances, drawdown cards, & microscopes.

Fednav Limited, headquartered in Montreal, is a privately owned company and the largest drybulk shipping group in Canada, this year celebrating 70 years of history. Fednav engages in several areas of transportation, among which are shipowning worldwide freight operations. The company is specialized in shipping dry and liquid bulk cargoes, and is particularly known for working with senior client management and between engineering and reliable operations. We are operated by a multidisciplinary professional services firm that delivers a comprehensive array of technical and strategic services, including consulting, information technology, engineering, process development, and project and construction management to the Mining, Metallurgical, Energy, and Infrastructure sectors. Hatch has served clients for over six decades with corporate roots extending over 100 years and has project experience in more than 150 countries around the world. With over 11,000 people in over 65 offices, the firm has more than $35 billion in projects currently under management. Clients recognize Hatch for its ability to bridge the gaps between research and innovative technologies, and between engineering and reliable operations. We are particularly known for working with senior client management to develop business strategies; managing and optimizing production; executing projects that involve the scaleup of process technologies; and managing startups, commissioning and rampups. Hatch delivers unprecedented business results for our clients through a commitment to quality, lower operating costs, more efficient utilization of capital assets, higher standards for safety and risk management, faster startups and continuous performance improvements in all projects and programs.

Iluka is a major participant in the global mineral sands industry. It is involved in the exploration, project development, operation and marketing of mineral sands products. Its main assets and operations are located in Australia, with a mining and processing operation in Virginia, USA. Iluka is the largest producer of zircon in the world, with an approximate market share of one third, and is the second largest producer of titanium dioxide minerals (rutile and an upgraded form of ilmenite, synthetic rutile). The company also has a royalty over iron ore sales revenues from specific tenements of BHP Billiton’s Mining Area C (MAC) province in the north west of Western Australia.

The Lubrizol Corporation, a Berkshire Hathaway company, is a technology-driven global company that combines complex, specialty chemicals to optimize the quality, performance and value of customers’ products while reducing their environmental impact. It produces and supplies technologies to customers in the paints & coatings, graphic arts, adhesives, home & personal care, and plastics markets. These technologies include dispersants, surface modifiers, and polymers for coatings applications and plastic processing. The portfolio of dispersant products includes the Solspere family of advanced hyperdispersants. Solspere products deliver excellent color strength and high loadings, while providing superior product stability. Lubrizol is also a leader in supplying technologies to customers for engine oils, driveline and other transportation-related fluids, industrial lubricants, as well as additives for gasoline and diesel fuel.

Malvern provides the materials and biophysical characterization technology and expertise that enables scientists and engineers to investigate, understand and control the properties of dispersed systems. These systems range from proteins and polymers in solution, particle and nanoparticle suspensions and emulsions, to sprays and aerosols, industrial bulk powders and high concentration slurries. Used at all stages of research, development and manufacturing, Malvern’s instruments provide critical information that helps accelerate research and product development, enhance and maintain product quality and optimize process efficiency. Our products reflect Malvern’s drive to exploit the latest technological innovations. They are used by both industry and academia, in sectors ranging from pharmaceuticals and biopharmaceuticals to bulk chemicals, cement, plastics and polymers, energy and the environment. Malvern systems are used to measure particle size, particle shape, zeta potential, protein charge, molecular weight, mass, size and conformation, theoretical properties and for chemical identification, advancing the understanding of dispersed systems across many different industries and applications.

Impact Colors, Inc., headquartered in Conshohoken, PA with laboratory facilities in Newark DE, provides an extensive variety of high quality effect pigments and visual delivery systems to the cosmetics and personal care markets worldwide. From intense and dramatic colors with a variety of pearlescent effects, to products that gently diffuse ambient light to help minimize the appearance of fine lines and wrinkles, Impact Colors’ pearlescent pigments can be used in a variety of applications, ranging from color cosmetics for eye, lip and face, to nail polish and personal care.
RPS Composites designs and manufactures composite corrosion resistant pipe systems and process equipment. From material selection through component design, stress analysis, manufacturing, shipping, installation, and maintenance, RPS ensures you realize the full benefits of your composite installation. We also offer a full range of services including installation, repair, training and inspection. RPS Composites has 6 locations in North America, 2 in Canada and 4 in the U.S.

Schlenk Metallic Pigments GmbH is a premier manufacturer of effect pigments for the coatings, printing, and plastics industries. Aluminum and gold bronze products are launched in the form of pastes, powders and granulate, or as so-called VMPs (Vacuum Metallized Pigments), to fully meet the specific requirements of our customers. Global presence with production sites in Europe, the USA and China, application technology departments in Germany, the USA, China, South-East Asia, and also a worldwide distribution and service network have resulted in Schlenk being and acting as a reliable partner for an worldwide distribution and service network have resulted in SCHLENK being and acting as a reliable partner for an international and demanding clientele.

The new Sefar X600 high temperature pleated bag for Micronizers! This new technology allows you to increase lifetime of your bag houses without any changes to your existing equipments. It is at the present under a new 53 months lifetime running record, and still going strong! Pass by to see us and discuss how the X600 can help you to improve your micronizing process! Sefar BDH is a Canadian Subsidiary of Sefar AG in Switzerland, a family owned company, in business since 1825. We develop a unique solution that can resist to the very harsh environment conditions that represents the TiO2 process. Sefar have offices around the world.

Sigmund Lindner, a Germany company, has over 150 years of technical glass bead and milling bead production know how along with over 10 years’ experience of development and production of high quality ceramic grinding media. Our extensive portfolio of grinding media is delivered worldwide for all wet milling applications. Sigmund Lindner has a high level knowledge of wet milling technology and performs process analysis for optimizations and cost savings. Siliceous Type ZZ, Yttria Stabilised Zirconium Oxide are used by many of the top TiO2 processing companies in the industry.

Sturtevant, Inc. is an international manufacturer of material processing equipment, including crushers, fine grinders and air classifiers providing processing solutions to the chemical, pharmaceutical, food and mineral processing industries. Specifically designed for the cosmetic and pigment industry, Sturtevant’s Steam Micronizer® Jet Mill grinds and classifies powders to low and sub-micron particle sizes in a single operation using high pressure air, gas or steam to induce particle-on-particle impact reduction. The product size is controlled by the operating pressure, which affects the particle collision velocity and by the feed rate, affecting the powder’s retention time in the grinding chamber. Particles are size classified by centrifugal force holding larger particles in the grinding area and centrifugal force that drives finer particles into the vortex for discharge. The mill pulverizes cosmetics, pigments, ceramic powders, as well as chemicals and minerals to narrow fine particle size distributions with no moving parts. The Micronizer® allows complete access to the internal material grinding chamber & compressed air chamber for easy cleaning and disassembles in minutes. A variety of replaceable liners are available to provide protection against wear and contamination. Sturtevant services include field testing, replacement parts, testing facility, consultation and remanufacturing. For more information contact info@sturtevantinc.com or visit www.sturtevantinc.com.

Service of tailor-made color solution to colorant manufactures Yipin Colorant builds on over 83 years of experience in the manufacture and supplier of colorant. It is a company with worldwide customers for their tailor-made color solution. It is committed to understanding the needs of its customers and working collaboratively with them to develop a customized value proposition to help them achieve renewed success. We supply products through companies in USA, Germany and China with R&D Center , service and logistic. Yipin Colorant is ISO-9001 quality certified and ISO-14001 environment certified ensuring that worldwide customers receive consistent quality-controlled products meeting the highest international specification of cosmetic pigment including European Standard,USA FDA Standard,Chinese Standard. With many years research and inspection method, as one of famous brands, Yipin Colorant has excellent success in cosmetic such as foundation, lipstick, eye shadow and nail polish etc,drug and food Yipin Colorant is one of the modern companies in this industry. It has a professional spirt developing safer and more reliable products for social life.

Dyes and Pigments covers the scientific and technical aspects of the chemistry and physics of dyes, pigments and their intermediates. Emphasis is placed on the properties of the colouring materials themselves rather than on their applications or the system in which they may be applied. The journal will interest a wide variety of workers in a range of disciplines whose work involves dyes, pigments and their intermediates, and provides a platform for investigators with common interests but diverse fields of activity such as cosmetics, reprography, dye and pigment synthesis, medical research, polymers, etc.

InvestorIntel is the global investment intelligence source for the innovative and entrepreneurial minded – bringing you the latest news, financial insights & market analysis.

Materials Today is a community dedicated to the creation and sharing of materials science knowledge and experience. Supported by Elsevier, we publish high impact peer-reviewed journals, organize academic conferences, broadcast educational webinars and so much more.

PCI Magazine is the global voice that offers technical solutions for coatings, inks and adhesives to formulators and manufacturers. PCI is proud to be the most respected and trusted monthly business-to-business brand serving the coatings industry. With the latest information deployed in our weekly Insider News e-newsletter, printed monthly in our magazine, and 24/7 information posted on our website, PCI will educate you on the coatings industry throughout the year.

Petrosil’s Titanium Dioxide Report is a global market intelligence tool for companies who wish to access valuable content and network with other organizations in a timely and efficient manner. The comprehensive databases and related services provide valuable added information for the TiO2 industry in the form of reports, pricing, resources, statistics, import & export data, directory databases etc.

RPS Composites designs and manufactures composite corrosion resistant pipe systems and process equipment. From material selection through component design, stress analysis, manufacturing, shipping, installation, and maintenance, RPS ensures you realize the full benefits of your composite installation. We also offer a full range of services including installation, repair, training and inspection. RPS Composites has 6 locations in North America, 2 in Canada and 4 in the U.S.

Schlenk Metallic Pigments GmbH is a premier manufacturer of effect pigments for the coatings, printing, and plastics industries. Aluminum and gold bronze products are launched in the form of pastes, powders and granulate, or as so-called VMPs (Vacuum Metallized Pigments), to fully meet the specific requirements of our customers. Global presence with production sites in Europe, the USA and China, application technology departments in Germany, the USA, China, South-East Asia, and also a worldwide distribution and service network have resulted in Schlenk being and acting as a reliable partner for an international and demanding clientele.

The new Sefar X600 high temperature pleated bag for Micronizers! This new technology allows you to increase lifetime of your bag houses without any changes to your existing equipments. It is at the present under a new 53 months lifetime running record, and still going strong! Pass by to see us and discuss how the X600 can help you to improve your micronizing process! Sefar BDH is a Canadian Subsidiary of Sefar AG in Switzerland, a family owned company, in business since 1825. We develop a unique solution that can resist to the very harsh environment conditions that represents the TiO2 process. Sefar have offices around the world.

Sigmund Lindner, a Germany company, has over 150 years of technical glass bead and milling bead production know how along with over 10 years’ experience of development and production of high quality ceramic grinding media. Our extensive portfolio of grinding media is delivered worldwide for all wet milling applications. Sigmund Lindner has a high level knowledge of wet milling technology and performs process analysis for optimizations and cost savings. Siliceous Type ZZ, Yttria Stabilised Zirconium Oxide are used by many of the top TiO2 processing companies in the industry.

Sturtevant, Inc. is an international manufacturer of material processing equipment, including crushers, fine grinders and air classifiers providing processing solutions to the chemical, pharmaceutical, food and mineral processing industries. Specifically designed for the cosmetic and pigment industry, Sturtevant’s Steam Micronizer® Jet Mill grinds and classifies powders to low and sub-micron particle sizes in a single operation using high pressure air, gas or steam to induce particle-on-particle impact reduction. The product size is controlled by the operating pressure, which affects the particle collision velocity and by the feed rate, affecting the powder’s retention time in the grinding chamber. Particles are size classified by centrifugal force holding larger particles in the grinding area and centrifugal force that drives finer particles into the vortex for discharge. The mill pulverizes cosmetics, pigments, ceramic powders, as well as chemicals and minerals to narrow fine particle size distributions with no moving parts. The Micronizer® allows complete access to the internal material grinding chamber & compressed air chamber for easy cleaning and disassembles in minutes. A variety of replaceable liners are available to provide protection against wear and contamination. Sturtevant services include field testing, replacement parts, testing facility, consultation and remanufacturing. For more information contact info@sturtevantinc.com or visit www.sturtevantinc.com.

Service of tailor-made color solution to colorant manufactures Yipin Colorant builds on over 83 years of experience in the manufacture and supplier of colorant. It is a company with worldwide customers for their tailor-made color solution. It is committed to understanding the needs of its customers and working collaboratively with them to develop a customized value proposition to help them achieve renewed success. We supply products through companies in USA, Germany and China with R&D Center , service and logistic. Yipin Colorant is ISO-9001 quality certified and ISO-14001 environment certified ensuring that worldwide customers receive consistent quality-controlled products meeting the highest international specification of cosmetic pigment including European Standard,USA FDA Standard,Chinese Standard. With many years research and inspection method, as one of famous brands, Yipin Colorant has excellent success in cosmetic such as foundation, lipstick, eye shadow and nail polish etc,drug and food Yipin Colorant is one of the modern companies in this industry. It has a professional spirt developing safer and more reliable products for social life.

Dyes and Pigments covers the scientific and technical aspects of the chemistry and physics of dyes, pigments and their intermediates. Emphasis is placed on the properties of the colouring materials themselves rather than on their applications or the system in which they may be applied. The journal will interest a wide variety of workers in a range of disciplines whose work involves dyes, pigments and their intermediates, and provides a platform for investigators with common interests but diverse fields of activity such as cosmetics, reprography, dye and pigment synthesis, medical research, polymers, etc.

InvestorIntel is the global investment intelligence source for the innovative and entrepreneurial minded – bringing you the latest news, financial insights & market analysis.

Materials Today is a community dedicated to the creation and sharing of materials science knowledge and experience. Supported by Elsevier, we publish high impact peer-reviewed journals, organize academic conferences, broadcast educational webinars and so much more.

PCI Magazine is the global voice that offers technical solutions for coatings, inks and adhesives to formulators and manufacturers. PCI is proud to be the most respected and trusted monthly business-to-business brand serving the coatings industry. With the latest information deployed in our weekly Insider News e-newsletter, printed monthly in our magazine, and 24/7 information posted on our website, PCI will educate you on the coatings industry throughout the year.

Petrosil’s Titanium Dioxide Report is a global market intelligence tool for companies who wish to access valuable content and network with other organizations in a timely and efficient manner. The comprehensive databases and related services provide valuable added information for the TiO2 industry in the form of reports, pricing, resources, statistics, import & export data, directory databases etc.
Perfection is The Ultimate in Dispersion Control

Perfecting Particle Size

The Sturtevant Micronizer® is used worldwide in over 200 TiO₂ production lines because it performs the most efficient and economical deagglomeration for the ultimate performance in dispersion, opacity, tint strength and a variety of additional benefits to both appearance and performance. That’s why it is the only machine licensed to bear the name MICRONIZER®.

- Available with operation by high pressure steam, hot air or ambient
- Proprietary wear protection system cuts operating costs by 60%
- Contamination free design with easy-clean features

* Some conditions apply to money back guarantee, contact Sturtevant for details.

www.sturtevantinc.com