Program

Montreux 2014

World Conference on Fabric and Home Care

6–9 October 2014
Montreux Music & Convention Centre | Montreux, Switzerland

Creating Value in the New Reality

Where global leaders shape the future of the fabric and home care industry to enhance our quality of life.

Another quality meeting organized by AOCS®
We create chemistry that makes household tasks love leisure time

Whether it’s baby food, orange juice, or ketchup stains, consumers expect efficient cleaning results when doing their laundry — even at low temperatures. Our expertise in high-performance chemicals and your know-how in consumer products fulfill these needs. Together, we offer convenient solutions that save consumers time, effort, and resources. When perfectly clean laundry and leisure time are no longer a contradiction, it’s because at BASF, we create chemistry.

www.homecare-and-i-and-i.basf.com/europe
Every day is full of wonderful moments.
Birds singing outside your window.
The clean feel of a freshly washed shirt.
A blue sky without a cloud in sight.
The smiling faces of children at play.
A tasty meal after a hard day’s work.
Some days are special —
weddings, birthdays, holidays ...
But even the ordinary days are precious.
At Lion our business revolves around ordinary days.
Providing the products people need
to maintain good lifestyle habits.
Supporting cleanliness, health and comfort,
while protecting our global environment.
This is our mission, one in which we take pride.
Inspired by the wonder of everyday life.
Dedicated to creating a future full of health, hope and happiness.
For people everywhere around the world.

life. love.
LION

LION CORPORATION
3-7, Honjo I-chome, Sumida-ku, Tokyo 130-8644, Japan
http://www.lion.co.jp/en/
Leading technologies for detergent, surfactant and chemical industries

**SURFACTANTS**
- Anionics
  - Sulphonation / Sulphation
  - Vacuum Neutralization
  - Drying
- Non Ionics
  - Ethoxylation / Propoxylation
  - Alkanolamides
- Amphoterics & Cationics
  - Betaines
  - Esterquats
  - Aminoxides

**DETERGENTS**
- Powder
  - Spray Drying Tower process
  - NTD (non tower/ agglomeration) process
- Liquids
  - Batch / Continuous

**ORGANIC CHEMICALS**
- Linear Alkyl Benzene
- Ethyl Alcohol
- Starch & Yeast
- Fatty Amines

**INORGANIC CHEMICALS**
- Sodium Silicate
- Sulphuric Acid
- Sodium & Potassium Sulphate
- Zeolite
- Sodium Tripolyphosphate
- Single & triple Superphosphates
- Phosphoric Acid
- NPK
- PAC (Poly Aluminium Chloride)

Detergents, Surfactants & Chemicals

Science behind Technology

www.desmetballestra.com
On behalf of AOCS, I welcome you to the World Conference on Fabric and Home Care.

The Montreux 2014 conference continues in the tradition of providing an essential program for our industry, and the stature of this conference has grown tremendously in its 37 year history. Creating Value in the New Reality is a challenge we all face every day and this year’s program represents another giant leap in focused relevance to our business. The topics and speakers have been carefully chosen to cover the strategic areas that leaders in both the business and technical sector can use to gauge current and upcoming trends that may impact their decisions for the future. Following the successful introduction of multiple CEO presentations at the last conference, we have invited CEOs from BASF, Henkel, KAO, Lion, Novozymes, and S.C. Johnson to give keynote addresses to share their keen perspectives for the business climate. We also have high-level speakers from major companies covering nearly every aspect of our business worldwide.

The exhibition of key companies will be a great place for networking and will host a reception, luncheon, and five breaks; with the Oktoberfest Welcome Reception and the Dinner Cruise offering excellent venues for socializing with your peers.

And there is even more: new this year is the Technology Showcase, which offers virtual presentations of the latest scientific developments; and the Industry Innovations Incubator highlighting new companies making a difference. You will want to visit both of these areas to see what’s developing.

High-impact, high-level talks are spread over all three days, so I can guarantee you that this is a conference that will hold your attention until the final talk on the last day.

I wish you the best as you experience all that this valuable conference has to offer!

Manfred Trautmann
Montreux 2014 General Chair
Managing Director
WeylChem AG, Switzerland

Welcome!
Executive Committee

Manfred Trautmann
General Chair
Managing Director, Detergents & Intermediates, WeylChem Switzerland AG, Switzerland

Keith Grime
Past Chair
President, JKG Consulting LLC; Adjunct Professor, Northwestern University; AOCS Past President, USA

Patrick Donnelly
Chief Executive Officer, AOCS, USA

Andrés Jaffé
Senior Vice President Global Home & Personal Care Business, BASF SE, Germany

John McIver
Director, Fabric & Home Care, Strategic Innovation & Technology, The Procter & Gamble Company, USA

Thomas Müller-Kirschbaum
Corporate Senior Vice President, Laundry and Home Care, Henkel AG & Co. KGaA, Germany

Mike Parkington
Senior Vice President Home Care R&D, Unilever R&D Port Sunlight, United Kingdom

Masaki Tsumadori
Research Fellow, R&D, Director, Kao Eco-Lab Museum, Kao Corporation, Japan

Conference Organizer

AOCS
P.O. Box 17190, Urbana, Illinois, USA
www.aocs.org

AOCS (American Oil Chemists’ Society) is a global professional scientific society for all individuals and corporations with interest in the fats, oils, surfactants, detergents, and related materials fields. For the past 100 years, AOCS has promoted the science and technology of lipids in the fats and oil industry through analytical methods, proficiency testing, peer-reviewed technical publishing, and providing venues for technical discussions and educational opportunities. Today, AOCS is a global partner in the science and technology industry with more than 4,200 members throughout 90 countries.
The Executive Committee would like to thank the following companies for their generous contributions to the World Conference on Fabric and Home Care. Their partnerships with Montreux 2014 are greatly appreciated.

SPONSORS

Technology Showcase and Refreshment Break

Oktoberfest Welcome Reception

Refreshment Break

Conference Badge Wallets

Enriching lives, in harmony with nature.

Internet Lounge, Wi-Fi, and Refreshment Break

Conference Notepads and Pens

Refreshment Break

Refreshment Break

Conference Bags

Networking Reception

Luncheon

Conference Dinner Cruise

MEDIA PARTNERS

CHEManager

EURASIAN CHEMICAL MARKET INTERNATIONAL BUSINESS MAGAZINE

happi Household Products

JOURNAL OF SURFACTANTS AND DETERGENTS

HPC Household Personal Care

hpicindia

INFORM

Times International

SOFW
Cooperating Organizations
Special thanks to these organizations for their generous support of Montreux 2014.

Associação Brasileira das Indústrias de Produtos de Limpeza e Afins (ABILPA)
www.abipla.org.br
For the last 35 years, the Brazilian Cleaning Products Industry Association (ABILPA) has represented the domestic, professional, and institutional areas of the cleaning products industry as a civil society on a national level. Member companies have significant participation in decisions, and stay well-informed of developments in the industry, harmonizing the needs and expectations of suppliers, producers and consumers. Our mission is to seek and propose viable alternatives to meet technical requirements within the cleaning products industry, while ensuring the effectiveness and safety of products offered to consumers. Therefore, ABILPA is also a channel of communication and knowledge to those responsible for regulating the industry. With this work, ABILPA seeks to defend the legitimate interests of its members, always directing them to solutions for the common interests of society.

Accord Australasia—Hygiene, Cosmetic & Specialty Products Industry
www.accord.asn.au
Accord Australasia is the national industry association representing manufacturers and marketers of hygiene, cosmetic and specialty products, their raw material suppliers, and service providers. We are the respected and influential voice of a dynamic and progressive industry, representing around 100 leading businesses—ranging from large multinational firms to smaller Australian-owned enterprises, as well as both local manufacturers and product importers—providing innovative and sustainable products essential for healthy living and maintaining a quality lifestyle.

American Cleaning Institute® (ACI)
www.cleaninginstitute.org
American Cleaning Institute® is the Home of the U.S. Cleaning Products Industry® and represents the $30 billion U.S. cleaning relative realms. It aims to reflect the wishes and requirements of its detergent, surfactant, and oleochemical industries as well as some institutions, information centers, and educational units for soap, surfactants, and oleochemical producers. ACI and its members are dedicated to improving health and the quality of life through sustainable cleaning products and practices.

Canadian Consumer Specialty Products Association (CCSPA)
www.ccspa.org
The Canadian Consumer Specialty Products Association (CCSPA) is the premier trade association representing the interests of its member companies since 1958. CCSPA is an industry trade association for member companies in Canada and the USA who manufacture, market, process, package, and distribute consumer, industrial, and institutional specialty products. Our mission is to enhance the ability of member companies to conduct business effectively by fostering industry and government cooperation, advocating for fair and science-based policies and laws, promoting industry-wide environmental sustainability initiatives, and providing a national voice for communications to all stakeholders. We have 36 member companies in 118 facilities across Canada. We are a $20 billion industry directly employing over 12,000 people. Our annual exports are in excess of $1 billion.

Consumer Specialty Products Association (CSPA)
www.cspa.org
The Consumer Specialty Products Association (CSPA) is the premier trade association representing the interests of companies engaged in the manufacture, formulation, distribution, and sale of more than $100 billion annually in the U.S. of familiar consumer products that help household and institutional customers create cleaner and healthier environments. CSPA member companies employ hundreds of thousands of people globally. Products CSPA represents include disinfectants that kill germs in homes, hospitals and restaurants; air fresheners, room deodorizers, and candles that eliminate odors; pest management products for home, lawn and garden, and pets; cleaning products and polishes for use throughout the home and institutions; products used to protect and improve the performance and appearance of automobiles; aerosol products and a host of other products used every day. Through its product stewardship program, Product Care®, and scientific and business-to-business endeavors, CSPA provides its members a platform to effectively address issues regarding the health, safety, and sustainability of their products. See more at: http://www.cspa.org/about-us/we-are-mission.html#sthash.Auy4Pf0.dpuf.

Euro Fed Lipid (EFL)
www.eurofedlipid.org
Euro Fed Lipid is a federation of 13 scientific associations concerned with lipids, fats, and oils. The federation represents 2000 individuals and companies. The mission of EFL is the furthering of lipid science and technology and the cooperation and exchange of ideas between scientists and technologists. Activities include the organization of international congresses at varying venues, the co-organization of the annual fair “oils+fats,” and the publishing of the “European Journal of Lipid Science and Technology”.

European Committee of Organic Surfactants and their Intermediates (CESIO)
www.cesio-congress.eu
CESIO was set up in 1974 to address issues affecting the European industry of organic surfactants and their intermediates. CESIO aims to develop new scientific knowledge in human health and environment to optimise the safe use of surfactants and to secure Industry’s contribution to the beneficial development of society at large. In 1991, CESIO initiated ERASM (Environment
& Health Risk Assessment and Management) in response to ongoing risk assessment activities in Europe. Subsequently, CESIO companies played an active role in the development of HERA (Human & Environmental Risk Assessment) on ingredients of household cleaning products. CESIO will hold the 10th World Surfactant Congress and Business convention from 1 to 3 June 2015 in Istanbul. This congress offers a unique opportunity, combining scientific, and technical presentations with a commercial platform that enables companies to meet with their customers and their suppliers along the surfactant value chain (http://www.cesio-congress.eu/).

**Industrial Association Hygiene and Surface Protection for Industrial and Institutional Applications (IHO)**

www.iho.de

Industrial Association Hygiene and Surface Protection for Industrial and Institutional Applications (IHO) is headquartered in Frankfurt am Main. The IHO represents the interests of the manufacturers of cleaning agents and disinfectants for large-scale and professional use in Germany. The business fields of the 52 member companies include health care, catering and kitchen hygiene, building and industrial cleaning, food production and processing, industrial laundries, and metal cleaning.

**International Fragrance Association (IFRA)**

www.ifra.org.org

The International Fragrance Association (IFRA) was founded in 1973 in Geneva to represent the collective interests of the fragrance industry. Its main purpose is to promote the safe enjoyment of fragrances worldwide. Together with the industry’s scientific centre, RIFM (the Research Institute for Fragrance Materials), the IFRA team endeavors to make sure that usage standards for fragrance materials are put into practice according to the available scientific recommendation, and that member companies comply with these standards. This voluntary approach enables the IFRA standards to be adopted very rapidly by fragrance houses worldwide and by the industry as a whole. IFRA represents an 8 billion US$ industry, which serves luxury and consumer goods sectors.

**International Association for Soaps, Detergents and Maintenance Products (AISE)**

www.aise.eu

A.I.S.E., the International Association for Soaps, Detergents and Maintenance Products, is the official representative body of this industry in Europe. Our membership totals 29 national associations across Europe and beyond. Through this network, we represent over 900 companies supplying both household and professional cleaning and maintenance products and services. These range from small and medium-sized enterprises to large multinationals.

**International Network of Cleaning Products Associations (INCPA)**

www.incpa.net

The International Network of Cleaning Product Associations (INCPA) is an informal coalition of trade associations located in various regions of the world that represent cleaning product formulators. The Network coordinates and actively engages in targeted efforts to better understand and address chemical management issues of international or cross-regional nature that

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**Novozymes Medley®** is the new multi-enzyme solution that is in harmony with your needs. Composed with select enzymes from the world’s premier enzyme portfolio, Medley® simply delivers an outstanding performance – every time. Stop by to hear more!
affect the cleaning products industry. The total value of products marketed by companies within INCPA member organizations is $126 billion (USD). Cleaning products are essential to society. INCPA members are committed to developing, manufacturing, distributing, and marketing innovative, sustainable and effective products that are safe for consumers and the environment. The Network’s members are committed to the development of products that improve the quality of life through hygiene and cleanliness, can be used safely and without unreasonable risk to the environment, and fulfill the principles of sustainability, as well as meeting or exceeding legal requirements.

Japan Oil Chemists' Society (JOCS)
www.jocs.jp
The Japan Oil Chemists’ Society (JOCS) was established on November 21, 1951. In 1954, the Society was registered officially as a public service organization by the Japanese Government. In 2011, the Society was authorized as a Public Interest Incorporated Association. The objective of the Society is to contribute to the advancement of science and technology on oils and fats, surfactants, oleochemicals, biochemical, and related substances through working to bring members of the Society closer together. In 2012, the Society celebrated the 60th anniversary of its establishment.

Japan Soap and Detergent Association (JSDA)
www.jsda.org
The Japan Soap and Detergent Association is the representative organization of manufacturers of soap, detergent, oleochemicals, and other chemical-related products in Japan and is the official face of the industry vis-à-vis other national and international industrial organizations.

Malaysian Palm Oil Board (MPOB)
www.mpob.gov.my
The Malaysian Palm Oil Board (MPOB) is the premier government agency entrusted to serve the country's oil palm industry. Its main role is to promote and develop national objectives, policies and priorities for the well-being of the Malaysian oil palm industry. MPOB has played an active role in developing new technology, which has contributed to the advancement of the Malaysian oil palm industry. In leading the industry, MPOB provides and promotes strong scientific and technological support through its commitment to R&D, the commercialization of its research findings and the transfer of knowledge and innovation. It also plays a significant role in matters relating to registration, licensing and enforcement.

Oil Technologists' Association of India (OTAI)
http://otai.org
The Oil Technologists’ Association of India (OTAI) was established in the year 1945 by Late Rao Saheb Athawale, Ex Principal of (H.B.T.I) Kanpur. The Association has five zones with a membership of about 1600 in Northern, Southern, Eastern, Western and Central India with its H.Q. at Kanpur. Members are from within the country and abroad. The members are represented by academia, research organizations, corporate houses, and government bodies. The OTAI promotes technological developments in the field of oils, fats, surfactants, oleo chemicals, and allied industries and disseminates knowledge by way of organizing short term courses, as well as national and international seminars. The Association keeps close liaison with several National and International bodies having similar aims and objectives. This year OTAI has entered into an agreement with AOCS to offer a very attractive AOCS Membership. It also publishes the peer reviewed quarterly journal “Journal of Lipid Science and Technology (Formerly JOTAI)”.

Swiss Cosmetic and Detergent Association (SKW)
www.skw-cds.ch
The Swiss Cosmetic and Detergent Association (SKW) is the leading Swiss national association of the cosmetics, detergent and cleanser industry, and the soap producers. The SKW is committed to protect and promote the common interest. The Association’s activities mainly focus on the representation of common entrepreneurial interests, the commitment to favorable basic conditions, and the promotion of a good public image of the industry.

The Indian Home and Personal Care Industry Association (IHPCIA)
www.ihpcia.org
The Indian Home & Personal Care Industry Association (IHPCIA) represents the Home & Personal Care (HPC) Industry and provides a platform for National & International networking and interaction with regulatory bodies. The Governing Council comprises of leading names from HPC industry. There are six subcommittees which are managed by experts, namely Standards Committee, Education & Communication Committee, Regulatory Affairs & Reforms Committee, Policy & Public Affairs Committee, Membership & Public Affairs Committee, and Resource mobilization committee. For more information visit www.ihpcia.org.

The Latin American Association of Cleaning Products Industry (ALIADA)
www.aliada.org
The Latin American Association of Cleaning Products Industry (ALIADA), was founded in November 2007, and has as main objectives: to strengthen synergies and synchronization between regulations concerning household products, toilet in Latin America, to foster the development of industry and trade of these products, and to facilitate communication between governments, industry, and consumers.

UK Cleaning Products Industry Association (UKCPI)
www.ukcpi.org
The UK Cleaning Products Industry Association (UKCPI) is the leading trade association representing the interests of the cleaning, hygiene, and surface care product manufacturers based in the UK. We represent our members’ interests directly with Government and broader stakeholders, including NGOs and key opinion formers on a range of technical and regulatory matters. We provide the industry voice to the media and engage proactively with journalists to provide information and comment to foster balanced reporting of our sector and to correct misleading coverage. We work with AISE to maximise the influence of the UK in the European arena. In addition, our members receive valuable advice and guidance regarding forthcoming legislation and regulation.

Cooperating Organizations Display
Visit Stand 403 in the Exhibition Hall for information such as upcoming conferences, books, magazines, and membership information.
Networking Events

Oktoberfest Welcome Reception
Monday, 6 October 2014
17.00–19.00
La Terrasse du Petit Palais,
Fairmont Le Montreux Palace
This event is included in the registration fee for full registration. Additional tickets may be purchased at the Registration Desk at the Montreux Music & Convention Centre or at the entrance to the reception for €125.00.

Networking Luncheon
Tuesday, 7 October 2014
12.30–14.00
Montreux Music & Convention Centre—Exhibition Hall

Networking Reception
Tuesday, 7 October 2014
17.45–18.45
Montreux Music & Convention Centre—Exhibition Hall

Conference Dinner Cruise
Wednesday, 8 October 2014
18.30–22.00
Montreux Boat Dock
This event is complimentary to the first 500 full registrants who selected this option when registering. If you registered for this event, your dinner cruise ticket is inside of your registration packet with your name badge.

IMPORTANT:
◆ Remember to bring your dinner cruise ticket with you, as tickets are required for boarding.
◆ Arrive by 18.30 for boarding as the boat will depart promptly at 19.00. If you do not arrive by 18.50, your seat will be given to someone from the wait list.
◆ On-site tickets for the cruise are available for €160.00, based on space availability. Please see the Registrar at the Convention Centre prior to Wednesday at 17.00; and after 18.00, the Registrar will be at the Montreux boat dock to assist you. If this dinner cruise is at capacity, the wait list will be on a first-come, first-served basis, and those interested should come to the Montreux boat dock in the event that there are no-shows.
◆ Have a ticket and now can’t attend? Please return your ticket to the Registration Desk so it may be used by someone from the wait list.

General Information

Registration Hours
Monday, 6 October 2014
14.00–17.00
Tuesday, 7 October 2014
7.30–18.45
Wednesday, 8 October 2014
8.00–17.00
Thursday, 9 October 2014
8.00–13.30

Exhibition Hours
Tuesday, 7 October 2014
9.30–18.45
Wednesday, 8 October 2014
9.30–17.00
Thursday, 9 October 2014
9.30–11.30

Attire
Meetings/Exhibition: Business
Oktoberfest Welcome Reception: Casual or Business Casual
Conference Dinner Cruise: Casual or Business Casual

Internet Lounge
AND
Wi–Fi
Available

Sponsored by
kao
Enriching lives, in harmony with nature.

Wi–Fi SSID: 2m2c_Free
No password required; just click “OK.”

Email stations are available at the Internet Lounge, located in the Exhibition Hall.
Montreux Information

Hotels
Fairmont Le Montreux Palace—Conference Headquarters Hotel
Avenue Claude Nobs 2, CH–1820 Montreux, Tel: +41 21 962 12 12

Best Western Eurotel Riviera
Grand Rue 81, CH–1820 Montreux, Tel: +41 21 966 22 22

Eden Palace au Lac
Rue du Théâtre 11, CH–1820 Montreux, Tel: +41 21 966 08 00

Golf–Hotel René Capt
Rue du Bon Port 53, CH–1820 Montreux, Tel: +41 21 966 25 25

Grand Hôtel Suisse Majestic
Avenue des Alpes 45, CH–1820 Montreux, Tel: +41 21 966 33 33

Hôtel Bon-Port
Rue du Théâtre 4, CH–1820 Montreux, Tel: +41 21 962 80 70

Hôtel Helvétique
Avenue du Casino 32, CH–1820 Montreux, Tel: +41 21 966 77 77

Hôtel Splendid
Grand Rue 52, CH–1820 Montreux, Tel: +41 21 966 79 79

Tralala Hôtel
Rue du Temple 2, CH–1820 Montreux, Tel: +41 21 963 49 73

Montreux Music & Convention Centre
Avenue Claude–Nobs 5, CH–1820 Montreux
Tel: +41 21 962 20 00; Fax: +41 21 962 20 20

Montreux-Vevey Tourisme
Visit them to learn about Montreux and the local attractions, restaurants, and tours available.
Pavillon d’information Montreux, Place d’Eurovision 1, CH–1820 Montreux
Tel: +41 848 86 84 84; Fax: +41 21 962 84 86

INVESTING IN CONVENIENCE AND SUSTAINABILITY. THIS IS THE FORMULA FOR EVOLUTION.

Oxiteno contributes to the technological evolution of the domestic and industrial cleaning markets by investing in solutions for surfactant and solvent systems that are increasingly more sustainable, multifunctional and efficient.
# Schedule of Events

All events take place at the Montreux Music & Convention Centre unless otherwise noted.

## Monday, 6 October 2014

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<tr>
<th>Time</th>
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<td>14.00–17.00</td>
<td>Registration</td>
<td>Exhibition Hall</td>
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<td>17.00–19.00</td>
<td>Oktoberfest Welcome Reception</td>
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<td>La Terrasse du Petit Palais, Fairmont Le Montreux Palace</td>
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<td>8.00–17.45</td>
<td>Technology Showcase</td>
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<td>9.00–9.55</td>
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<td>9.55–10.25</td>
<td>Break</td>
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<td>12.30–14.00</td>
<td>Networking Luncheon</td>
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<td>11.00–14.00</td>
<td>Palace Café Open</td>
<td>Exhibition Hall</td>
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<td>12.00–14.00</td>
<td>Midday Break (Food and beverages for purchase at the Palace Café)</td>
<td>Auditorium Stravinski</td>
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ORAL PRESENTATIONS

Discussion

◆ A dedicated discussion will be held immediately following each keynote presentation.
◆ General discussions will be held at the end of each session.
◆ Have a question? Special notepads are available at the room entrance. Attendants will be stationed in the room to collect your questions. Questions will be delivered to the session chair and read aloud during the appropriate discussion period.

Photography and Recording Policy

In the Session Rooms: No video recording, tape recording, or still photography is allowed, except by registered media.
In the Exhibit Hall: Video or still photography of exhibitors’ booths is not allowed, unless permission is granted by the exhibitor. Video or still photography of Technology Showcase presentations is also not permitted.

INNOVATION THROUGH COLLABORATION
Work with MonoSol for Disruptive Innovation in Your Industry

Join us for our Live Presentation
The Antifouling Jump to Ever More Sustainable Unit-Dose Technology
By P. Scott Bening, President & CEO
Division General Manager

By Tom Yogan,
Sr. Vice President Technology

To learn more about our company visit our website at monosol.com
SUSTAINABILITY ► ► ► Face it
Realize the balance of economic realities and environmental responsibility.

**Oral Presentations ◆ Montreux Music & Convention Centre, Auditorium Stravinski**

**Morning**

**Session Chair**
Masaki Tsumadori, Research Fellow, R&D; Director, Kao Eco-Lab Museum, Kao Corporation, Japan.

**Co-Chair**
Katja Scharpwinkel, Managing Director for BTC Europe GmbH, Germany.

9.00 **Introduction of the Conference and Keynote.**
Patrick Donnelly, CEO, AOCS, USA; and Manfred Trautmann, Managing Director, Detergents & Intermediates, WeylChem Switzerland AG, Switzerland.

9.05 **KEYNOTE**
Creating Value in the New Reality.
Kasper Rorsted, CEO, Henkel AG & Co. KGaA, Germany.

We are facing immense challenges. The world’s population is expected to grow to 9 billion in 2050. The acceleration in global economic activity will lead to rising consumption and resource depletion. Competition for available resources and environmental pressures will thus intensify in the coming decades. At the same time, corporate responsibility and sustainability are increasingly becoming a focus of public attention.

Business leaders are aware of this challenge. But are we delivering the solutions society, customers and consumers are expecting from us?

In the UN Global Compact’s survey of 1,000 CEOs, just 32% responded that they believe the global economy is on track to meet the demands of a growing population within environmental and resource constraints. Only 33% of CEOs believed that business as a whole is doing enough to address global sustainability challenges.

Will we therefore need to rely on government intervention to address market failures and drive progress?

At Henkel, we are convinced that business has to take the lead. We can shape our future – based on a common understanding of our social, environmental, and economic priorities. To implement these we will need to collaborate with our partners to drive progress along our value chains. Sustainability involves the full value chain, feedstock suppliers, raw material suppliers, formulators, trade as well as consumers.

If we embrace the challenge and embed sustainability in our business operations and in our daily actions we can turn it into a success factor for the long term growth of our industry.

9.35 Keynote Discussion

9.55 Break ◆ Sponsored by MonoSol LLC, WS Film Division of Kuraray, USA

10.25 **Introduction of the Session.**
Masaki Tsumadori, Research Fellow, R&D; Director, Kao Eco-Lab Museum, Kao Corporation, Japan.

10.30 **The Anthropogenic Jump to Ever More Sustainable Unit-dose Technology.**
P. Scott Bening, President & CEO/Division General Manager, MonoSol LLC, WS Film Division of Kuraray, USA.

Water-soluble unit dose delivery systems have been around for over 50 years. For the last 25 years, these monodose products have greatly impacted humanity and our natural world in extremely positive ways. Massive amounts of landfill waste has been avoided, millions of people have been kept safer from exposure to potentially harmful materials, over-dosing for materials has incredibly reduced, millions of gallons of transport fuel have been
Imagine living in a city in 2050. In a home with nanobots to sort your waste, a self-cleaning bathroom and where you can make your own plastic! By 2050, it is estimated that 70% of the 10 billion world’s population will live in cities. Which means today’s population! Considering the already existing short term challenges we have in energy, materials and water security, economic and social prosperity, every decision we take today will write the history of tomorrow and shape our society. After a brief presentation of those prospects, Hélène Lebedeff, Deputy Director/Sustainable Development, Veolia Environnement, France.

Rapid population growth poses serious challenges to our food supply, our energy needs and the health and safety of our planet. While these challenges are daunting, scientists around the world are hard at work pointing the way towards sustainable solutions. Recent advances in the biosciences are already helping to provide abundant and nutritious food, lessening our dependence on fossil fuels and protecting people and the environment. From powerful enzyme technologies that allow consumers to save energy and water by washing their clothes at significantly lower temperatures, to new hybrid seeds, to renewably-sourced polymers, DuPont is harnessing the power of integrated science and collaboration to deliver products that meet environmental, economic, and societal demands. With the commercialization of cellulosic technology, we can now unlock new sources of low cost carbon. Carbon that is renewable. The production of advanced biofuels is just the beginning. Learn how this and other science-based solutions can create a new generation of innovation, sustainability and growth.

**10.55 Sustainability Challenges in Fast-growing Cities.**
Hélène Lebedeff, Deputy Director/Sustainable Development, Veolia Environnement, France.

**Meeting Global Challenges with Sustainable Solutions.**
James C. Collins, Jr, Senior Vice President, Polymers and Industrial Biosciences Businesses, DuPont, USA.

**11.45 Sustainability and Economic Value Growth—Is There Still a Trade-off?**
Gianni Ciserani, Group President, Global Fabric and Home Care, The Procter & Gamble Company, Switzerland.

The pressure on businesses operating in a globalised world continues to increase. There is an expectation of sustained financial growth, whilst balancing the impact on communities and the environment. Consumers want enhanced performance, but at a competitive price point. This is all set against a backdrop of finite resources and the responsibility to leave our planet in good shape for future generations.

Governments and business are announcing ambitious sustainability goals and it is our responsibility to deliver. At the same time, emerging markets with rapidly growing populations want to consume products in the same way established markets do. Once you subtract the realities of the market from the ambitious sustainability goals there is a very clear void. Does this mean we have to prioritise economic growth over an environmentally sustainable future? At P&G, we believe that there are opportunities to eliminate the frustrating trade-offs that limit more comprehensive commercialization of sustainable solutions. Investing in innovation, partnering for success, and mobilizing our people through a culture focused on sustainability as a priority are critical elements required for success.

**12.10 General Discussion**

**12.30 Networking Luncheon • Sponsored by The Procter & Gamble Company**
Light lunch to be served in the Exhibition Hall.
Afternoon

Session Chair
Thomas Müller–Kirschbaum, Corporate Senior Vice President, Laundry and Home Care, Henkel AG & Co. KGaA, Germany.

Co-Chair
Shelagh R. Muir, Vice President R&D Home Care, Unilever R&D Port Sunlight, United Kingdom.

Co-Chair
Masaki Tsumadori, Research Fellow, R&D; Director, Kao Eco-Lab Museum, Kao Corporation, Japan.

14.00 Introduction of Session and Keynote.
Thomas Müller–Kirschbaum, Corporate Senior Vice President, Laundry and Home Care, Henkel AG & Co. KGaA, Germany.

14.05 KEYNOTE
Michitaka Sawada, President and CEO, KAO Corporation, Japan.

Climate change, water scarcity, declining natural resources, hygiene, health and aging populations are global social issues facing us all. Issues like these are not only driving change in people’s lives globally, they are also directly impacted by the actions we take in our everyday lives.

As an industry responsible for essential household goods, expectations are high of our role in addressing these issues. Our response here must include working together with consumers to make everyday living more sustainable: and it is clear that the point of use of fabric and home care goods by consumers is key.

Coming up with new values that allow consumers to change or accelerate change in their everyday lifestyles and behavior will be vital. This is not an easy task for our industry. Value offerings that are simply an extension of what went before will not spark surprise or delight among consumers nor drive change. At the same time, offerings that are too far ahead of consumer expectations and experiences will not be relevant to them or easily adopted.

We must determine just how far ahead of consumer expectations is both “appropriate” and “disruptive”: this is what I have dubbed a “half-step ahead” value offering.

It is not enough for one company to deliver a “half-step ahead” value offering. I believe we must also translate these into industry-wide movements. Each one of us may continue to expend considerable effort in our pursuit of “half-steps ahead” but it will be the innovators coming up with the outstanding “half-step ahead” value offerings that we will turn to; and we must also recognize the importance of the role of “amplifiers” or, in other words, the companies that expand and build upon those new “half-steps ahead”.

I would like to see all of us in fabric and home care contributing to industry-wide movements: building on a “half-step ahead” value offerings to truly address the global social issues we face today.

14.35 Keynote Discussion

14.55 Break ◆ Sponsored by Kao Corporation

15.25 Sustainability—The Limitless Opportunities in Emerging Markets.
Nitin Paranjpe, President Home Care, Unilever PLC, United Kingdom.

The world around us is changing rapidly with key mega trends shaping the future of our business – population is rising, world is rapidly moving east and south, digital revolution is changing the way we interact and the rise of middle class that will live differently from the way they live today. By 2020, locus of economic activity will firmly move to emerging markets with estimated 900m people entering the consuming class across Asia, LaAm and Africa. More urbanization, nuclear families and, most importantly, nearly 800m more women will be joining the work force.

These trends will have significant social, economic and environmental implications and consequently will have a profound impact on business. More people with more money and less time will aspire for better products to suit their evolving lifestyles. Rapid urbanization will pose new challenges of household cleaning, health, hygiene and sanitation. Water scarcity could reach alarming levels with estimated that 2/3rd of the world to be water starved by 2020! Increase in consuming classes would lead to even greater stress on natural resources, infrastructure and environment, impacting consumer choice and expectations from us, our brands and products.

While these are massive challenges they also offer limitless business opportunity. New products and solutions will be needed to address these needs while minimizing environmental impact. This is a rich space for innovations, partnerships and business growth, as surely if emerging markets grow to consume in the same way as the west does it would be catastrophic.

15.50 Beyond the Planetary Boundaries.
Johan Rockström, Executive Director, Stockholm Resilience Centre, Sweden.

There is overwhelming evidence that humanity, just in the past couple of decades, has surpassed the natural forces of change on Earth, and become a quasi-geological force of change at the planetary scale. In this situation, defined as a whole new geological epoch, the Anthropocene, the world needs to profoundly rethink the paths to future prosperity. We are approaching nine billion people, all with a right to development, in a situation where humanity is hitting the biophysical ceiling of Earth’s capacity to support human development. In this hyper-connected, globalized and fully inter-
dependent world, social and ecological changes interact, with rising risks of crossing tipping-points with irreversible and potentially catastrophic implications for human development. Sustainable development needs to be redefined, from the current three pillar approach of social, economic and ecological sustainability, to a new development paradigm of human development within the safe operating space of a stable planet. The planetary boundaries framework is advanced by science as a support to such a paradigm, by defining, based on the latest science, the boundaries for the key environmental processes that regulate the stability and resilience of the planet, beyond which the world enters a danger zone of rapidly rising risks. In this presentation it is argued that the world of policy and business increasingly acknowledges this new human predicament, manifested e.g., in the UN process of defining sustainable development goals, and the World Business Council for Sustainable Development (WWF) initiative of setting concrete global sustainability goals for 2020 (Action 2020). Planetary boundaries only define a biophysical ceiling for world development on a stable planet. Business, policy, and communities face enormous challenges of navigating world development inside this safe operating space (bending the global curves of negative global environmental change). The world also faces huge opportunities of using global sustainability goals, such as planetary boundaries, as incentive for deep innovation and transformation of business models, technologies, and system design, to achieve a global transition to sustainable prosperity in the world.

Environmental sustainability has become an essential ingredient to doing business successfully and responsibly. As part of the global retail ecosystem, where we set our sights has the potential to save customers money and help ensure a better world for generations to come. At the same time, it sets the stage for a more financially stable and responsible Walmart.

Customer expectations have changed. Customers demand transparency, safer alternatives, and affordability. They expect voluntary industry leadership to deliver these solutions. Walmart’s sustainability approach is to catalyze collaboration and build a new level of trust with customers.

What Our Industry is Expected to Deliver.
Alberto Luis Dominguez, Senior Vice President, Divisional Merchandise Manager, Household Paper Goods and Chemicals, Walmart, USA.

Antitrust Policy
The American Oil Chemists’ Society (the ‘Society’) intends to strictly comply with the antitrust laws of the United States, all state governments, and any other relevant governing authority (the ‘Antitrust Laws’), and in furtherance of this intention, proclaims the following Antitrust Policy:
I. The Society shall not be used in a manner which violates the Antitrust Laws, and members of the Society, in their capacity as representatives of the Society, shall not tolerate, encourage or participate in any activity which could reasonably be expected to result in a violation of the Antitrust Laws.
II. This policy shall apply to all membership, board, committee and other meetings of the Society, and all events attended by individual members of the Society in their capacity as representatives of the Society.
III. The Society recognizes that the Antitrust Laws make certain activities between industry participants unlawful, and the Society expressly prohibits participation in such activities at any event which the Society holds or sponsors, or by any member of the Society at any event in which such member participates as a representative of the Society. Such prohibited activities include the following:
A. Non-competition, territorial division, or operationally restrictive agreements;
B. Boycotting, blacklisting, or unfavorable reporting; or
C. Discussion of these and other prohibited matters, including the following:
   i. Price, price fixing, price calculation, or price changes;
   ii. Costs;
   iii. Terms or conditions of sales;
   iv. Quote decisions;
   v. Discounts;
   vi. Product or service offerings; or
   vii. Production or sales volume, capacity or plans.
IV. In the course of any event in which activities or discussion threatens to border on a prohibited matter, any member, officer, director, employee or representative of the Society present at such event in such capacity shall request that the activity or discussion be terminated immediately, and if such termination does not immediately occur, such person shall seek recordation of the problem if appropriate, shall cease all participation in the event, and shall report the matter to the Society at the earliest possible opportunity.
V. A copy of this Antitrust Policy shall be given at least annually to each officer, director, member, representative, or employee of the Society, or any other party participating in the Society, and the Antitrust Policy shall be readily available at all membership meetings.

KEYNOTE
A Revolution of Diversity.
Peder Holk Nielsen, President and CEO, Novozymes A/S, Denmark.

Over the course of its nearly 6,000-year evolution, biotechnology has broadened our understanding of the origin of life on this planet. Today, biotechnology informs key solutions that will help us withstand exponential population growth and solve other global environmental and social issues. Novozymes CEO Peder Holk Nielsen will explore the potential of biotechnology and share his unique insight into some of the world’s most significant biotech projects currently in progress. He’ll also make some intriguing predictions on where biotech is going and which upcoming technologies could be most exciting for the Home Care industry.

16.40 General Discussion
16.50 Introduction of Keynote.
Shelagh Muir, Vice President R&D Home Care, Unilever, United Kingdom.

17.25 Keynote Discussion
17.45 Networking Reception • Sponsored by Oxiteno
DAY 2 | Wednesday, 8 October 2014

GROWTH ▶ ◀ ◀ Find it

Discover innovations to benefit society.

Oral Presentations ◆ Montreux Music & Convention Centre, Auditorium Stravinski

Morning

Session Chair
Keith Grime, President, JKG Consulting LLC; Adjunct Professor, Northwestern University; AOCS Past President, USA.

Co-Chair
Masaki Tsumadori, Research Fellow, R&D; Director, Kao Eco-Lab Museum, Kao Corporation, Japan.

9.00 Introduction of the Session and Keynote.
Keith Grime, President, JKG Consulting LLC; Adjunct Professor, Northwestern University; AOCS Past President, USA.

9.05 KEYNOTE
Sustainability as a Growth Driver.
Kurt Bock, Chairman of the Board of Executive Directors, BASF SE, Germany.

Sustainability and the chemical industry - a perfect match or a marriage of convenience? Showing concrete examples, Kurt Bock will provide insights on how BASF is driving sustainability within its businesses. He will address major sustainability trends shaping the chemical industry and opportunities, while also making aware of the associated conflicts of interest, as sustainability is balancing economic success with social and environmental responsibility.

9.35 Keynote Discussion

10.25 Reaching the Connected Consumer.
Nicola Mendelsohn, Vice President, Facebook EMEA, United Kingdom.

Increasingly, many of us live in the default state of ‘always on’ through our mobiles and social networks. And when it comes to mobile, people are moving much faster than brands.

This isn’t simply a matter of people spending more time with one screen or another, this is about a radical transformation of how all of us are discovering, connecting and engaging with the world.

Facebook is an integral part of the connective tissue of the web and its Vice-President of Europe, Middle East, and Africa, Nicola Mendelsohn, will discuss the role that mobile and Facebook play in reaching the connected consumer.

She will explore how you can find the people that matter to your business, create experiences that really matter to them and do it at a scale that really matters to your bottom line.

10.50 Designs on the Future, Now. What Will Define Our Market in 2030 and Beyond?
Ian Bell, Head of Home Care Research, Euromonitor International, Inc., United Kingdom.

2030 is a fairly arbitrary date to set in the context of gazing into the future. Much can change, but it is still possible to predict, with a degree of confidence, some of the challenges that the industry will face. If we take the millennium as our starting point, by the time we meet in Montreux, we will already be within touching distance of the mid-way point towards our 2030 goal.

Sustainability, the focus of day one at Montreux, will be a key part of a puzzle that seeks to marry the prospect of another rise in demand with the question of limited resources. The world’s population will stand at close to 8.5 billion by 2030, making it more than one billion higher than it is today. That is a lot of new laundry, but where will it all come from?

The geographical focus of laundry will continue to realign with global demographic trends, but also with incomes, technology and evolving washing practice. While the automation of the laundry process, which has typified market development so far, will no
doubt continue, can we really rely on the ‘magic washing machine’ to deliver results time and again?

To date, the industry has been able to expand its consumer base to become a very consistent performer, and the long-term future appears bright but we need to be more inclusive. Inclusion in 2030; not an issue focused solely on low incomes, but a principle which is also very appropriate to consumers residing in the world’s most advanced markets.

11.15  Living in the Past or Creating the Future.
Nabil Y. Sakkab, Managing Director, Sakkab LLC, USA.

Major growth comes from radical innovation that restructures industries with new dominant designs. Without sufficient radical innovation, economies, markets and businesses will remain stuck in vicious cycles of incrementalism that eventually destroy value. What will it take for the fabric and home care industries to shed a decades old reputation for incrementalism and to create a new virtuous cycle with radical innovation to sustain profitable growth? This presentation will discuss the principles of radical innovation and approaches the industries might take to bring forward a totally different consumer experience to market.

11.40 General Discussion
12.00 Midday Break

Afternoon

Session Chair
John McIver, Director, Fabric & Home Care, Strategic Innovation & Technology, The Procter & Gamble Company, USA.

Co-Chair
Hiromitsu Takaoka, Director of Fabric-Care Research Laboratories, Lion Corporation, Japan.

14.00 Introduction of the Session and Keynote.
John McIver, Director, Fabric & Home Care, Strategic Innovation & Technology, The Procter & Gamble Company, USA

KEYNOTE
Life, Love, Laundry—Cleanliness for Beautiful Smiles and Sceneries.
Itsuo Hama, President and CEO, Lion Corporation, Japan.

The ultimate goal of our cleanliness industry should be to ‘bring beautiful smiles to all the people in the world’ and to ‘preserve beautiful landscapes throughout the world.’

Under the corporate slogan ‘Life, Love, Lion,’ Lion devotes itself to advancing technological and product innovations that will deliver customers healthier lives, brighter smiles and cleaner environments.

The world is facing a time of drastic change, including massive shifts in global societies such as rapid economic development centering on Asia and its resulting lifestyle changes, aging societies in developed economies, and environmental destruction. Lion will continue to innovate to adapt to these changes while remaining committed to its mission of beautiful smiles and landscapes by continuously supporting initiatives that can help realize clean living environments.

Our three key concepts in realizing our mission are:

(1) To take learning and growth from the experiences of developed countries and apply them to the challenges of developing countries to realize a greater level of cleanliness and in turn build a cleaner, sustainable future;

(2) To create new, innovative standards of cleanliness that can deliver joy to consumers and society by fulfilling both their clear and hidden needs; and

(3) To spread these new standards of cleanliness around the world through continuous collaboration with related companies and industry associations.

Our slogan is “Life, Love, Laundry!”

14.35 Keynote Discussion
14.55 Break

The Importance of Sanitation and Hygiene in Development.
Therese Dooley, Senior Advisor, UNICEF, USA.

Why are sanitation and hygiene important in development? They are important because they help every child survive and reach their full potential. They prevent children from suffering from disease and malnutrition — lack of toilets and poor hygiene are the main causes of diarrhea, which results in over 600,000 child deaths annually. They matter for the economy of the nation—for every US$1 spent on sanitation brings a US$5.50 return by keeping people healthy and productive. And they provide an important measure of privacy and dignity especially for women and girls. Unbelievably, in 2014, 36% of the global population or 2.5 billion people around the world do not have access to proper sanitation and there are over 1 billion people who still practice open defecation.
It can make cleaning effortless, and produce easier formulations with lasting fragrance... just the products your customers are demanding and your economics require.

Ashland helps manufacturers of fabric, home and institutional products develop innovative formulation architecture that leads to improved choices for your customers and maximum results for your bottom line.

Included among our offerings that make great things happen is Sorez™ 100 polymer, a technology that imparts wicking properties to hydrophobic textiles for superior soil release and anti-redeposition effects. Another technology, Sorez™ H5 205 polymer, is substantive to negatively charged surfaces, reducing the ability of soil to stay in place and allowing for easier cleaning.

Jaypol™ acrylic-based polymers protect carboxylated surfactants, bleach systems and whitening agents from inactivation; they also provide surface modification and help stabilize emulsions and dispersions.

Offering the largest range of cellulosic-based polymers, Ashland supports a range of products for rheology control, cold-water-solubility, film-forming properties and anti-soil redeposition. Leading producer of PVP-based polymers, Ashland offers a wide range of solutions for tablet binding, dye transfer inhibition and enzyme stabilization.

Now offering micro-encapsulates that are formaldehyde-free, Ashland helps you obtain lasting fragrance and delivery of actives in a friendly profile.

Go ahead. Partner with Ashland for extraordinary results.
Visit us at the World Conference on Fabric and Home Care - Stand #202 and on the web at Ashland.com/homecare.
Until now, phosphate has been playing the core role in classic and multi-benefit detergents for automatic dishwashing. It has been an indispensable ‘star’ performer as builder and was even seen as ‘mother’ of cleaning. In automatic dishwashing, phosphate survived the voluntary industry agreement not to use phosphates in laundry by 3 decades. By new legislation in 2017, dishwashing detergents in Europe then have to be phosphate free, which will finally mark the end of the phosphate era in automatic dishwashing.

This however does not mean that the dishwashing industry is slow in offering sustainable solutions for consumer needs. The global improvements achieved via a combination of chemistry and machine technologies to reduce the energy and water impact of dishwashing should reflect this. The historic perseverance of phosphate rather indicates how daring the journey will be when hard-water-Europe bans this chemistry!

Multi-benefit monodose detergents, designed to perform at higher water hardness are the biggest segment in the European automatic dishwashing market. To deliver ‘today’s’ performance also ‘tomorrow’ will possibly pose the biggest technical threat the dishwashing industry ever faced since its origins.

Despite on one hand capturing the technical challenge to become a phosphate free industry, this presentation on the other hand also attempts to show that turning away from phosphate is just one step amongst a range of strategies the global dishwashing industry is working on to continue to be a model industry for sustainable innovation.

Collaboration between these two industries has a long tradition. From a commercial perspective, both work on the same customer base, even though the one has to convince his customers on a daily base to buy the right product, whilst the appliance manufacturers meet their customers in much longer periods of time, with the challenge to keep the link during this wide frame of purchasing.

Also on the technology side, detergent and home appliance industry are caught in the same boundaries. Temperature, time, mechanical treatment and chemistry are providing the right cleaning result, first, even sometimes unexpressed requirement of our customers.

Reduced energy consumption, limited flexibility in program duration and reduction of the use of natural resources are the challenges, both industries are facing. Last not least, convenience of use is a central market request and marketing argument for appliance and detergent.

Further to these market requirements, European and Global standardization activities are setting the legal frame for any new products and need to reach a balance between comparability, real use and innovation.

In the past, technical collaboration between these industries happened more on an occasional, that on a regular base, leading sometimes to “semi-optimized” products from customer perspective.

With the challenge of the market, the fact that separate physical and chemical technical improvements are approaching a borderline, intensive cooperation between appliance and detergent manufacturer will be the only future way to achieve significant improvements and real sustainable products.

The definition of a process for this cooperation in the environment of a highly competitive market is the management challenge and the growth opportunity for our industries.
The perceived integrity of both science and business is threatened by declining consumer trust. The institutions of business, science and even government are losing consumers’ confidence. Third parties, from environmental NGOs to bloggers, have stepped in to fill the void.

We absolutely need third-party affirmation, but when the public is educated based on shoddy science and self-serving agendas, it’s a ‘no-win’ situation for science, business and consumers alike. Business must take the lead. Trust must be earned through sound science, through transparency, and through integrity in communication and not by promoting fears, myths or through green washing. We must turn around the chemophobia and as an industry, we need to reframe, rebuild consumer trust. Transparency and integrity in communications is key.

SC Johnson has sought to establish trust through a process we call Greenlist and through a commitment to integrity in science and communication. We have experienced progress and missteps. As chemists and corporations, we must regain trust. We must stand up for chemistry, for scientific truth, and for the health and wellness of consumers and the planet.

9.35 Keynote Discussion

9.55 Air Care: An Industry of Consumer Inspired Growth.
Gerard Baillely, Vice President, R&D, Global Home Care and P&G Professional United States, The Procter & Gamble Company, USA.

Air care innovation has consistently improved the quality of life for humans throughout history. Today, across developed and developing regions, consumers continue more than ever to look for air care products that make their homes places that foster positive social and family connections, well-being and self-esteem.

The air care industry takes advantage of deep consumer understanding and scientific advances to resolve consumer needs with innovative and safe products. These innovations deliver delightful positive sensory experiences and, importantly, eliminate the root causes of the negative ones. Scientific domains that fuel this innovation include:

1) Understanding how scent and malodors are decoded by the consumer’s olfactory system;
2) How and where to quench undesirable components like malodor that compromise air quality;
3) Sustainably designed product delivery systems that deliver delightful sensory experiences at the right intensity and eliminate the negatives where and when the consumer needs; and
4) The safety review that follows the risk assessment paradigm - a continuous process beginning with product inception, continuing through product development to product launch and after launch with post market product safety surveillance.

This rigorous multi-pronged scientific, sustainability, safety and consumer based approach enables the air care industry to be credible to key stakeholders and to ensure the development of superior innovations that truly improve consumer’s lives, which will in return create value for our industry.
Africans’ consumer facing industries are expected to grow by more than USD 400 billion by 2020. That would account for more than half the total revenue increase that all businesses are expected to generate in Africa by the end of the decade. The world has caught on to the potential of this surging consumer market. But many companies, particularly those new to the continent, have little idea how to translate the opportunity into action. It is not their fault – there has been a lack of research about the African consumers’ attitudes, behaviour and needs historically. But that is changing: in one of the first studies of its kind, the McKinsey Africa Consumer Insights Center surveyed 13,000 consumers in ten countries, concentrating on the largest African cities.

The survey generated a range of insights, including these findings:

- Africans are exceptionally optimistic of their economic future; 84 percent say they will be better off in two years.
- Internet use is far greater than expected – more than 50 percent of urban Africans say they have accessed the Internet in the last four weeks, on par with reported usage in Brazil and China.
- African consumer demand quality products and are brand conscious, belying the view that the continent is a backwater where companies can sell second-rate merchandise.
- African consumers want the latest fashions and a modern shopping experience.

Our research has broad implications for consumer-facing companies considering entering or expanding their presence in Africa. We will explore these implications and the dynamics of the African fabric and homecare market in more detail during the presentation.

10.45 Break  ◆ Sponsored by Meghmani Industries Ltd.

11.15  A Personal Business in an Impersonal World.
Catherine Ehrenberger, Vice President R&D and Quality Assurance, Amway, USA.

Direct selling is the very definition of a personal business: people selling products to people. In this business model, people connect one-on-one with customers, sharing their own experiences with using the products. They demonstrate how customers can use home and laundry care products to achieve their desired home environments. They help customers choose personalized nutrition and beauty products to enhance their lives.

These personal encounters are powerfully persuasive – direct selling globally is a US$178.5 billion industry, and in an age where technology increasingly replaces human contact, direct selling continues to grow.

Amway is a US$11.8 billion manufacturer that began in 1959 with a single home care product. But what we are really about is people realizing their potential. We give entrepreneurs the opportunity to discover what they can do when armed with world-class products, the support to learn new skills and the experiences of more than 3 million other people much like themselves, who want to realize their own potential. We support Amway Business Owners with free training; business and marketing tools, including robust online and e-commerce tools; three power brands and more than 450 home, nutrition and beauty products. More than 21,000 employees worldwide, including more than 900 scientists, engineers and technical professionals in 75 R&D and Quality Assurance labs worldwide, are dedicated to their success.

How much power is behind the personal sell? Amway has brands that lead their categories in worldwide sales, including two home care durable products, and a global top 5 prestige brand. Our measure of success, however, is how well Amway Business Owners succeed in achieving their personal goals, from earning income to learning skills to making a difference in their communities.

11.40  Is Latin America the Future Home of Sustainable Sourcing for Home and Fabric Care?
Leandro Soncini Rodrigues, Head of Marketing–Home & Personal Care, Oxiteno, Brazil.

Latin America (LATAM) has experienced strong growth since 2004, driven by macroeconomic policies and structural reforms. These changes have fostered an emergent middle class that has boosted the demand for consumer goods – particularly for those in home and personal care. Over the last five years, the absolute home care growth across LATAM’s largest economies – Brazil, Mexico and Argentina – reached US$11 billion, more than the growth of Western Europe and North America combined.

This trend is not unique to LATAM. In other emergent regions around the globe, the consumption of household goods is increasing rapidly and demanding more and more of the limited resources and feedstock available on the planet. Recognizing the trajectory, society is putting pressure on the home care industry to develop solutions and sources of raw materials to support this growth in a sustainable way. In confronting these challenges we ask the question; could developing economies, and specifically LATAM, actually play leading roles in developing a sustainable future?

LATAM has a lot to offer. The region’s natural wealth includes 15% of world oil reserves, 46% of soybean production, a mature platform for sugar cane and millions of hectares with suitable conditions for palm plantations. On the other hand, the lack of infrastructure, bureaucratic challenges, rising costs and several social-political issues represent obstacles to be overcome.

12.05  Balancing Sustainability with Consumer Trends.
Tom LaForge, Global Director, Human and Cultural Insights, The Coca-Cola Company, USA.

The success of your company and your brands depends on just two things: the decisions you make internally and external forces. Those external forces can be market forces or cultural forces and each year that goes by cultural forces grow stronger as determinant of your future success. So what are these cultural forces? Is your process for identifying cultural forces as robust as your process for staying on top of market forces? This session will provide a framework for identifying and describing cultural forces followed by specific suggestions for how sustainability efforts can be used...
to enhance trust in your company and loyalty for your brands. Trust and loyalty are relational issues that take time and attention. Too often our day-to-day demands do not afford the time we need to take stock of how the world is changing, how this is reshaping the expectations people have of our companies and the role we must play as collaborative members of civil society. The nature of capitalism itself is transforming and only by understanding the cultural forces driving this process can we assure that you, your brands, and your company evolve as the world evolves.

12.30  A Roadmap Towards the Ultimate Natural Born Cleaners, Combining Science and Creativity.
Tom Domen, Long Term Innovation Manager, Ecover, Belgium.

Ecover has been leading a quiet revolution for 35 years now. A revolution based on respect for nature and dedication to finding sustainable alternatives for a healthier future. In simple terms, our aim is to produce effective household products that are not harmful to people or the environment. Behind that seemingly straightforward goal is a strong commitment to working in harmony with our environment for the benefit of everyone, including generations to come.

Our holistic approach challenges some of the fundamental principles of the industrial age: while the world is addicted to oil, we are moving away from the use of finite fossil fuels to minimize our impact at every stage. The availability of oil did indeed change many people’s lives for the better. However it is now undeniably time for a radical new approach with the world’s resources being stretched under an increasing population, climate changes deteriorating life conditions and political and social instability caused by our dependence on this limited resource.

A shift is already happening with consumers as well as companies towards more socially and ecologically responsible products. Although many companies are moving in the right direction with the right intentions, real substantial change on a large scale can only happen if we unlock the paradigm in the complete system. That of course takes time, dedication and specialization to find materials, processes and methods that fit the bill. This is why Ecover is committed for the long run to continually keep searching for innovations and solutions that will enable a sustainable, future-proofed society.

To date, Ecover has already pioneered a wealth of innovations. We’ve replaced most petrol based ingredients with plant based alternatives; replaced tropical oils with locally sourced crops; turned waste into active ingredients; produced fully plant based packaging; and are helping to clean up the seas by using discarded plastic to create recyclable bottles. All this while maintaining high product performance standards.

As scientists, we learn from the world around us, using some of the fascinating intricacies of nature that have evolved over millennia to help us perform everyday tasks. As environmentalists, business people and parents, Ecover hopes to be a leading example of what can be achieved when we stay connected to what is important in life.

12.55  General Discussion

13.10  Closing Comments.
Manfred Trautmann, Managing Director, Detergents & Intermediates, WeylChem Switzerland AG, Switzerland.
Technology Showcase
Auditorium Stravinski Lobby

View the latest scientific discoveries!

The Technology Showcase will highlight, in virtual format, outstanding technical and consumer-led innovations from senior technologists and managers representing leading corporations, government organizations, and academic institutions worldwide. The video presentations are web-based, so you may access them at any time from your laptop, tablet, or phone.

Abstracts begin on page 35.
Video presentations at http://Montreux.aocs.org/resources.

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John M. McIver, Chair
The Procter & Gamble Company, USA

Michael Dreja
Henkel AG & Co. KGaA, Germany

Scott Power
DuPont, USA

Hans Jürgen Scholz
WeylChem Wiesbaden GmbH, Germany

Nilesh Shah
The Dow Chemical Company, USA

Computer kiosks available:

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Visit with the Authors!

Auditorium Stravinski Lobby
Authors will be present at the Technology Showcase area to discuss their research during these breaks:

Tuesday, 7 October 2014

9.55–10.25

1. **Perfumes as Cleaning Technology—Design Innovation:** Creating Value through Superior Freshness. T. Audibert, Givaudan, Argenteuil, France.

2. **Superior Consumer Delight Enabled by Novel Encapsulation Platforms.** J. Smets, Procter & Gamble, Strombeek Bever, Belgium.


5. **Functional Unit Dose Film Technology.** T. Yogan, MonoSol LLC, IN, USA.

6. **Physical Chemistry and Performance Properties of Extended Chain Surfactants.** G. Smith and H. Jennings, Huntsman Performance Products, TX, USA.

7. **Powerful, Sustainable Surfactant Designed to Replace Solvents.** C. Gariepy and R. Masters, Stepan Company, IL, USA.

14.55–15.25

8. **Leading Auto Dish Technology.** I. Vockenroth, J. Zipfel, and T. Eiting, Henkel AG & Co. KGaA, Duesseldorf, Germany.

9. **Novel Builder for Automatic Dish Detergents.** S. Brijmohan1, C. Cyprca1, E. De Maesschalck2, and C. Malet3, 1Lubrizol Corporation, OH, USA, 2Lubrizol Corporation,

16. Laundry Paradigm-breaking: The Challenge of Simultaneously Improving Cleaning and Fiber Care. N. Laut and A. Franco, 1P&G Fabric Care, Newcastle, United Kingdom, 2P&G Fabric Care, Geneva, Switzerland.


22. Improved Fluorine-free and Solvent-free Silicone Emulsions, and their Applications in Household Care. R. Becker and M. de Schmidt-Camilleri, Wacker Chemie AG, Munich, Germany.

23. Combining the Benefits of Alcohol Ethoxylates and Alkyl Polyglucosides in Cleaner Formulations. C. Boehne, D. Kischke, A. Boehn-Chastang, and G. Merkle, 1BASF Personal Care and Nutrition GmbH, Monheim, Germany, 2BASF Personal Care and Nutrition GmbH, Düsseldorf, Germany, 3BASF SE, Ludwigshafen, Germany.


25. Synthesis of Dialkylamidoamineoxide Type Zwitterionic Surfactant Having Dual Function of Cleaning and Softening Effects. D.S. Han, J.C. Lim, and D.W. Kim, 1Aekyung Advanced Institute, Daejeon, South Korea, 2Dongguk University, Seoul, South Korea.


27. Linear Alkylbenzene Sulfonates: Revisiting the Influence of Molecular Weight and Isomeric Distribution on Detergent Properties. C. Prieto, M. José Escudero, I. López, E. Álvarez, and J. Lázaro, 1CEPSA Research Center, Alcalá de Henares, Spain, 2CEPSA Química, San Roque, Spain.


29. Vegetable Oil Ethoxylate Surfactants: Physical Chemistry and Performance Properties. G. Smith and G. Watkins, Huntsman Performance Products, TX, USA.

Wednesday, 8 October 2014

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33. Use of Silicone Foam Control Agents in Liquid Laundry Detergents. M. Severance, Dow Corning Corporation, MI, USA.

34. New Polymer Technologies, as a Most Effective Mean, to Thicken a Wide Variety of Clear Home Care Liquid Formulations. E. Everaert, B. Kroom, P. Brand, P. Gillette, A. Pickert, and P. Cowan, 1Ashland ASI Global Hair & Home Care R&D, Zwijndrecht, The Netherlands, 2Global Molecular Science, DE, USA.


We welcome our Corporate Members to Montreux 2014!

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Corporate Members as of 21 August 2014
The Exhibition

Visit with leading companies providing product and service solutions for the fabric and home care industries. New to the Exhibition is the Industry Innovations Incubator. The exhibition is the center for conference networking featuring refreshment breaks, Tuesday luncheon, a networking reception, and plenty of room for conversation. Wireless internet access and the Internet Lounge are also available, compliments of Kao Corporation.

Exhibition Hours

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Industry Innovations Incubator

Where cutting-edge ideas are nurtured for success!

The Industry Innovations Incubator features emerging companies selected by the Executive Committee for their innovative contributions to the industries. Each company will have a poster display, a video presentation, and will be available at scheduled times to discuss their products.

Meet the Innovators

Tuesday, 7 October 2014

| 9.55–10.10 | Rivertop Renewables |
| 10.10–10.25| Institute for Applied Surfactant Research |
| 14.55–15.10| Revolymer (UK) Ltd. |
| 15.10–15.25| Cosun Biobased Products B.V. |

Wednesday, 8 October 2014

| 9.55–10.10 | BigHeads Network |
| 10.10–10.25| DEINOVE |
| 14.55–15.10| Amyris |
| 15.10–15.25| Ingeniatrics Tecnologias S.L. |

Thursday, 9 October 2014

| 10.45–11.00| PolymerExpert |
| 11.00–11.15| Elevance Renewable Sciences |

Innovators’ video presentations available at: http://Montreux.aocs.org/resources.
Exhibitor Directory
Exhibitor and Sponsor videos available at: http://Montreux.aocs.org/resources.

Amyris (INCUBATOR)
Meet this Innovator at 14.55 on Wednesday, 8 October 2014
5885 Hollis Street, Suite 100 Emeryville, CA 94608, USA
www.amyris.com

Amyris is a global renewable products company providing sustainable alternatives to a variety of non-renewable resources using its innovative bioscience technology to convert plant sugars into hydrocarbon molecules. Amyris creates ingredients that can be used in products for flavors and fragrances, cosmetics, solvents and lubricants, diesel and jet fuel, and polymers.

A.R. Sulphonates Pvt. Ltd. (412)
White House Building, 21 CR Avenue, Floor #1
Kolkata, West Bengal 700072, India
www.foglagroup.com
AR.SulphonatesPvt.Ltd.(FoglaGroup,India) is a 100% EOU, ISO 9001:2008 Certified Company, a Government recognized Star Export House, manufacturer and exporter of LABSA (Linear Alkyl Benzene Sulphonic Acid), AOS (Alpha Olefin Sulfonate), SLES (Sodium Lauryl Ether Sulfate) and SLS, supplying to almost 50 countries worldwide for application in detergent powder, bars, liquids, creams and other detergent/cosmetic based applications. Our plants are located in Mumbai, India with excellent connectivity to North and South Americas, Middle East and Africa.

Ashland (202)
1005 US 202/206 Bridgewater, NJ 08807, USA
www.ashland.com

Providing insights in formulation architecture that often lead to better results with improved economics, Ashland helps manufacturers of fabric, home and institutional products address consumer needs worldwide. Included among its technologies that help improve formulation results are Sorez™ 100 polymer, Sorez™ HS 205 polymer, Jaypol™ 213 polymer, PVP-based polymer innovations, cellulosic rheology modifiers and formaldehyde-free microencapsulants.

Buss Chem Tech AG (106)
Hohenrainstrasse 12A
Pratteln, 4133, Switzerland
www.buss-ct.com

Buss ChemTech is recognized by major chemical producers as a world leading process technology supplier for gas/liquid reactions including hydrogenation, alkyoxilation, amination, methylation, quarternization and many others. Our technology is employed extensively in many markets including oleochemical derivatives. We provide development and engineering services up through turn-key installations.

BigHeads Network (INCUBATOR)
Meet this Innovator at 9.55 on Wednesday, 8 October 2014
464 Newark Street, #5, Hoboken, NJ 07030, USA
http://bigheadsnetwork.com

BigHeads is a brain trust made up of bright minds, creative thinkers and problem solvers from diverse fields and interests who contribute their unique perspectives to help companies boost their creative output, develop innovative products, generate unique insights and find solutions to difficult problems.
Subsequently, CESIO companies played risk assessment activities in Europe and Management) in response to ongoing (Environment & Health Risk Assessment Istanbul. This congress offers a unique convention from 1 to 3 June 2015 in World Surfactant Congress and Business products). CESIO will hold the 10th on ingredients of household cleaning (Human & Environmental Risk Assessment surfactants and their intermediates. CESIO aims to develop new scientific knowledge in human health and environment to optimise the safe use of surfactants and to secure Industry’s contribution to the beneficial development of society at large. In 1991, CESIO initiated ERASM (Environment & Health Risk Assessment and Management) in response to ongoing risk assessment activities in Europe. Subsequently, CESIO companies played an active role in the development of HERA (Human & Environmental Risk Assessment on ingredients of household cleaning products). CESIO will hold the 10th World Surfactant Congress and Business convention from 1 to 3 June 2015 in Istanbul. This congress offers a unique opportunity, combining scientific and technical presentations with a commercial platform that enables companies to meet with their customers and their suppliers along the surfactant value chain.

Cosun Biobased Products B.V. (INCUBATOR)
Meet this Innovator at 15.10 on Tuesday, 7 October
Van de Reijtstr. 15
Breda, 4814, The Netherlands
www.consunbiobased.com
Cosun Biobased Products manufactures and markets innovative biobased products that derive from renewable resources. We are backward integrated and offer our customers security of supply. With our consistent strategy we have become the world’s main manufacturer of Carboxy Methyl Inulin (Carboxyline® CMI) and of a patented novel and unique structurant (Betafib® MCF).

Council for LAB/LAS Environmental Research (CLER) (506)
Avenue Edmond van Nieuwenhuyse 4
Brussels, 1160, Belgium
www.cler.com
The Council for LAB/LAS Environmental Research (CLER) is comprised of scientists and technical specialists from the Americas, representing manufacturers of Linear Alkylbenzene (LAB) and Linear Alkylbenzene Sulfonate (LAS), the environmentally-proven laundry surfactant. Founded in 1988, our mission is to conduct research on the safety of LAB/LAS and provide data to regulators and the public.

CP Kelco (208)
Cleeve Court, Cleeve Road
Leatherhead, Surrey KT22 7UD, UK
www.cpkelco.com
CP Kelco is a leading global manufacturer of hydrocolloids. Our signature products, KELZAN® Xanthan gum, FINNFIX® Cellulose gum and KELCOGEL® Gellan gum are versatile, water-controlling biopolymers ideal for thickening, gelling, suspension of solid ingredients and for use as an anti-redeposition aid in a variety of laundry and household applications.

DEINOVE (INCUBATOR)
Meet this Innovator at 10.10 on Wednesday, 8 October 2014
CAP SIGMA, ZAC Euromédecine II, 1682 rue de la Valsière
Grabels, 34790, France
www.deinove.com
DEINOVE is a biotechnology company developing bioproduction processes based on Deinococcus bacteria. DEINOVE optimizes natural fermentation and metabolic capabilities of these bacteria to produce, from non-food biomass, high value-added products such as bio-based chemicals of industrial use. The Company provides its enabling technology under license to industrial partners globally.

Desmet Ballestra SpA (308)
Via Piero Portaluppi, 17
Milano, 20138, Italy
www.desmetballestra.com
World leader in the design and supply of plants for anionic surfactants, non-ionic surfactants and detergents. The company is a preferred technology supplier to all the major surfactant and detergent manufacturers worldwide, and has built no fewer than 1,800 plants in over 120 countries since its foundation in 1960.

Dow Corning Corporation (406)
Sponsor of the Wednesday Afternoon Break
2200 West Salzburg Road
Midland, MI 48686, USA
www.dowcorning.com
Dow Corning provides performance-enhancing solutions to serve the diverse needs of more than 25,000 customers worldwide. A global leader in silicones, silicon-based technology and innovation, Dow Corning offers more than 7,000 products and services. A global leader benefiting everyone, everywhere.
ECOSOL (306)
Avenue Edmond van Nieuwenhuyse 4
Brussels, 1160, Belgium
www.lasinfo.eu

ECOSOL is a sector group of the European Chemical Industry Council (CEFIC) and represents the European producers of Linear Alkylbenzene (LAB). ECOSOL was created in 1985 with the objectives of covering issues affecting the LAB and LAS (Linear Alkylbenzene Sulphonate) industry, particularly from the scientific, technical, environmental, economic and documentary angles. ECOSOL maintains close contacts with its sister associations such as the Council for LAS/GAS Environmental Research (CLER) in the USA and CLETSA in Asia. ECOSOL benefits from a solid working relationship with other international organisations concerned with common issues such as the European Committee of Organic Surfactants and their Intermediates (CESIO). CESIO and ECOSOL share common objectives related to the surfactant industry, and both provide a forum mainly on health, safety, environmental and trade issues arising from the manufacture, transport, storage, use and disposal of surfactants.

Elevance Renewable Sciences (Incubator)
Meet this Innovator at 11.00 on Thursday, 7 October 2014
2501 Davey Road
Woodridge, IL 60517, USA
www.elevance.com

Headquartered in Woodridge, IL, Elevance Renewable Sciences is a high-growth specialty chemicals company that creates novel specialty chemicals from renewable feedstocks using a proprietary technology called olefin metathesis. The company helps industry deliver products for use in personal care, detergents, cleaners, engineered polymers, lubricants, additives, and other specialty chemicals markets.

Household and Personal Care Today (409)

Media Partner
Viale Brianza 22
Milano, 20127, Italy
www.teknoscienze.com

Homecare, I&I, personal care, cosmetics and dermatology are the topics of H and PC Today – Household and Personal Care Today. Funded in 2003 as a supplement to Chimica Oggi – Chemistry Today, it gained an immediate appreciation and soon became a new independent publication distributed worldwide. In accordance with the sound scientific style of its publisher TeknoScienze, H and PC Today – Household and Personal Care Today accounts the innovations that the research brings to people in fields such as skincare, homecare and wellbeing. The journal guests both technical and opinion articles and regularly deals with topics like sustainable innovation and regulations. Monographic supplements to the journal focusing on specific selected topics of interest are regularly published along with the main issues of the journal. H and PC Today – Household and Personal Care Today works closely with many associations in the sector and important university faculties. Providing accurate information on companies and its people is the link that keeps it all together.

IIT Srl (206)
Via Alba 18
Busto Arsizio, 21052, Italy
www.iitsrl.it

Founded in 1976, IIT provides design, engineering and construction of plants and equipment for the production of surfactants for the detergent, cosmetic, leather, textile and chemical industries. IIT supplies a wide range of complete sulfonation and detergent plants, as well as individual systems, equipment and services: continuous sulfonation plants; falling film reactors; electrostatic precipitators; high shear mixer homogenizers; multipurpose detergent specialties plants for betaines, amides, and sulfosuccinates; DeDiox units; engineering services; and technical services.

INCPA (301)
Cooperating Organization
AV. Hermann Debroux 15A
Brussels, Belgium
www.incpa.net

International Network of Cleaning Product Associations (INCPA) is an informal coalition of trade associations located in various regions of the world that represent cleaning product formulators. The Network coordinates and actively engages in targeted efforts to better understand and address chemical management issues of international or cross-regional nature that affect the cleaning products industry. The total value of products marketed by companies within INCPA member organizations is $126 billion (USD). Cleaning products are essential to society. INCPA members are committed to developing, manufacturing, distributing, and marketing innovative, sustainable and effective products that are safe for consumers and the environment. The Network’s members are committed to the development of products that improve the quality of life through hygiene and cleanliness, can be used safely and without unreasonable risk to the environment, and fulfill the principles of sustainability, as well as meeting or exceeding legal requirements.

Ingeniatrics Tecnologias S.L. (INCUBATOR)
Meet this Innovator at 15.10 on Wednesday, 8 October 2014
P.I. Parque Plata, C/Camino Mozárabe 41
Camas, Seville 41900, Spain
www.ingeniatrics.com

We provide technically innovative products and services of superior quality and value, based on our proprietary Droplet and Microencapsulation platforms. Energy efficient sustainable solutions to generate homogeneous and adjustable to the desired drop size, particles or capsules with complex internal structures. Smooth processes compatible with any liquid, with the versatility and adaptability in formulation required by our customers.
University-based surfactant research

**Institute for Applied Surfactant Research/University of Oklahoma (Incubator)**

*Meet this Innovator at 10.10 on Tuesday, 7 October 2014*

100 East Boyd, EC Rm T-301
Norman, OK 73069, USA
www.ou.edu/content/coe/cbme/research/iasr.html

The Institute for Applied Surfactant Research (IASR) consists of seven University of Oklahoma faculty members performing research with surfactants in such diverse fields as detergent formulation, environmental remediation, enhanced oil recovery, dispersant stabilization, and drug delivery systems. IASR is the premier University-based surfactant research center in the world today.

**Italmatch Chemicals Group (402)**

Via E. Vismara, 114
Arese (Mi), 20020, Italy
www.italmatch.it

Italmatch is a global specialty chemical group, with leadership in lubricant, water and oil, detergents, plastics, additives, markets and technology leadership in phosphorus derivatives (both organic and inorganic), polymers, esters and chlorides—from synthetic to fully natural products. Five manufacturing plants are located in Europe (Italy, Spain, Germany and UK) and three in Asia Pacific (China and Japan) but the company has a worldwide coverage thanks to its subsidiaries in Belgium, Poland, USA, Japan, Singapore and China.

**Lubrizol (207)**

Avenue Jean Monnet 1
Louvain-la-Neuve, 1348, Belgium
www.lubrizol.com

Lubrizol develops, manufactures and markets specialty chemicals for personal care and home care. Our innovative ingredients and additives modify physical properties, enhance functional performance and deliver aesthetic benefits. Lubrizol’s mission in Home Care is to deliver solutions that enhance the cleaning, care and protection of fabrics, surfaces and dishes.

**Lukem (407)**

Tiranova 38
Ljubljana, 1000, Slovenia
www.lukem.si

Lukem d.o.o. is a trading company specialized in raw materials for detergent, paint and food industries. It was founded in 1995 and has its main office in Ljubljana, Slovenia (Europe). Besides its main office Lukem also has an office in China which is responsible for quality/loading control and an office in the U.A.E. which takes care of our customers in East, West and South Africa. Lukem’s main markets are Africa, Middle East and Latin America and also has customers in Europe, Far East and South America. Our main advantages are good service, competitive prices and top quality raw materials.

**Mazzoni LB SPA (313)**

Corso Sempione 212 bis
Busto Arsizio, 21052, Italy
www.mazzonilb.it

Mazzoni LB welcomes all participants to Montreux 2014, an unique opportunity to present the latest innovations in soap processing and finishing and the newest technologies in chemical plants, liquid detergents, confectionery, sustainable and efficient solutions to respond to the demanding requests of a competitive market in continuous evolution.

**Mazhmani Industries Ltd. (405)**

Sponsor of the Thursday Break

301, White Cross, 15 Patel Society, Bulbei Tekra Road, Panchwati
Ahmedabad, 38006, India
www.mazhmanidyes.com

The US$150 million Ahmedabad based Mazhmani group began modestly in the year 1977. Today the Mazhmani group has 12 plants spread over 370,000 square meters of land and is equipped with the latest machinery to manufacture a wide range of dyestuffs, pigment powders, dye intermediates, Optical Brighteners and agrochemicals. Extensive investments in R & D have enabled Mazhmani group to establish a prominent presence in the manufacture of pigments and dye stuff as well as basic crop protection chemicals. Maintaining international standard in product quality has ensured customer satisfaction reflected in repeated orders from existing clients in 30 countries. Activities of Mazhmani: optical brightening agents; pigments; dyes; crop protection chemicals; fine chemicals; and chlor alkali derivatives.

**MKS Devo Chemicals (214)**

Ardich Evler Siteai Yasemin Sokak
Istanbul, 34510, Turkey
www.mksdevo.com

ISO 9001:2008 certified Chemical company that specializes in production of Chemicals for Detergent, I&I Cleaning, Industrial Water Treatment, Construction and Textile industries. Our 120,000,00 tons/year production capacity production site, BCC (Bandirma ChemicalComplex) is located in Bandirma Turkey with excellent logistics access to EMENA regions. Our products are commercialized in domestic and export markets through Polymers, Phosphonates, Poly-Naphthalene Sulphonate, Industrial Chemicals and Textile Auxiliaries business divisions.

**Nanjing SIXIN Scientific-Technological Application Research Institute Co, Ltd. (108)**

Building D11, Zijin Tech Incubation Special Park, No. 199 Mufu East Road
Nanjing, Jiangsu, 210028, China
www.sixinchem.com

SIXIN, founded in 1992, specializes in R&D and production of foam control agents. SIXIN drafts China’s first national defoamer standard. SIXIN’s defoamer covers from silicone to non-silicone, water soluble to oil soluble, solid to liquid, single to synthetic and they’re widely used in 12 different industrial processes, such as detergent, pulp & papermaking, petrochemical, textile, water treatment, food processing, paint & ink etc. SIXIN will always concentrate on innovation of foam control technology. Until the end of 2013, SIXIN has applied for 70 national patents and 6 international patents.
**Exhibition Catalog**

**Novozymes A/S (312)**

**Sponsor of the Conference Bags**

Krogshoejvej 36
Bagsvaerd, 2880, Denmark
www.novozymes.com

Novozymes is the world leader in bioinnovation. Together with customers across a broad array of industries we create tomorrow’s industrial biosolutions, improving our customers’ business and the use of our planet’s resources. With over 700 products used in 130 countries, Novozymes’ bioinnovations improve industrial performance and safeguard the world’s resources by offering superior and sustainable solutions for tomorrow’s ever-changing marketplace. Read more at www.novozymes.com.

**Paramount Minerals and Chemicals Limited (311)**

33 Old Hanuman Lane, 1st Cross Lane, 2nd Floor, Kalabadevi Road
Mumbai, Maharashtra 400 002, India
www.pmclindia.com

Paramount is manufacturer of specialty chemicals such as: optical brighteners for detergents, paper and textile industries; polymer/anti-redeposition agent for laundry detergents and cleaning products; glycerol monostearate for cosmetics and food industries; and cationic guar gum for the personal care industry. We are certified for ISO 9001, ISO 14001 & OHSAS 18001.

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www.polymerexpert.fr

PolymerExpert is a company at the forefront of polymer research and development working in partnership with SME, global companies and research institutes. Our clients benefit not only from our skill and experience, but also from our extensive intellectual property portfolio including thermo-sensitive polymers, self healing materials, shape-memory polymers, photochromic polymers.

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**Revolymer (INCUBATOR)**

**Meet this Innovator at 14.55 on Tuesday, 7 October 2014**

1 Newtech Square, Zone 2, Deeside Industrial Park
Deeside, Flintshire CH5 2NT, UK
www.revolymer.com

Utilising our expertise in polymer and encapsulation technologies, Revolymer can work with you to create compelling consumer benefits for your home and professional care products. Our polymer and encapsulation technologies enable new product formats with improved stability, activity, and customer convenience. Read more at www.revolymer.com or contact us on enquiries@revolymer.com.

**RIDCI (507)**

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Shanghai, 200540, China
www.slsac.cn

China Research Institute of Daily Chemical Industry (RIDCI) is the most authoritative research institute of surfactants/detergents and focuses on R&D, production, education, national standardization, and marketing information, and conference. RIDCI aims at developing advanced surfactant products and enhancing the surfactants industry in China. Featured companies include the Shanghai Fine Chemical Co., Ltd. and Sinolight Surfactants Technology Co., Ltd.

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About CLER

The Council for LAB/LAS Environmental Research (CLER), founded in 1988, is the premier source of information about the safety and benefits of linear alkylbenzene sulfonate (LAS) — the environmentally proven surfactant — and its precursor ingredients, including linear alkylbenzene (LAB). CLER is comprised of scientists and technical specialists representing LAB and LAS manufacturers from the Americas, and coordinates closely with our counterparts in Europe and Asia. CLER’s mission is to conduct research on the safety of LAB/LAS and provide this data to regulators and the public. Visit us at our newly relaunched website, www.cler.com.

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About ECOSOL

ECOSOL was founded in 1985 as a sector group of the European Chemical Industry Council (CEFIC) to represent the European producers of Linear Alkylbenzene (LAB).

ECOSOL addresses issues affecting the LAB (linear alkylbenzene) and LAS (linear alkylbenzene sulphonate) industry, particularly from the scientific, technical, environmental, economic and documentary angles.

ECOSOL maintains close contacts with its sister associations in Europe, in the USA, the Council for LAB/LAS Environmental Research (CLER) and in Asia, CLETSA. ECOSOL also enjoys a very close cooperation with the European Committee of Organic Surfactants and their intermediates (CESIO) and the Environment and Health Risk Assessment and Management research partnership of the

Detergents and Surfactants Industries in Europe (ERASM).

CESIO and ECOSOL share common objectives related to the surfactant industry and provide a forum on health, safety, environmental issues arising from the manufacture, transport, storage, use and disposal of surfactants.

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Continuing on this journey, encapsulation will enable more consumer delight in different ways. Once the platform is applicable to other ingredients totally new product proposals will become a reality. One can anticipate new degrees of freedom in formulation, new horizons in the use of unique ingredients, breakthrough stability profiles, improved cost efficiency and solutions to long standing technical contradictions in consumer products.

We will describe one such transformative encapsulation platform and dream with you about the future and applications in the Household Care Industry.


Encapsulation enables environment-specific protection and release of actives. For household and laundry applications in particular, it would be convenient to have capsules that are impermeable to a detergent environment, but yet rapidly release actives upon dilution of detergent in wash water. We discuss herein, the use of an encapsulation process and new to the world shell compositions that have very robust mechanical properties in high salt, low water environments (e.g. HDL, household cleaners) as compared to lower salt, higher water environments (e.g. wash water in washing machine). Use of such a shell material as an encapsulating agent could result in capsules that stabilize actives in laundry detergent formulations (protect active from detergent or vice versa) and disintegrate on dilution of said detergent in wash water. This method would provide a capsule and payload that is robust in product but exhibits triggered release upon use.


Liquid laundry detergent is a growing product category on a global level. Consumers will continue to switch from powder to liquid detergents, encouraged by a trend to more concentrated products and innovative new liquid single dosage forms. Highly concentrated product formats reduce transportation resources and thus save energy and at the same time support the global trend to more convenient product formats. While the consumer appreciates the contribution of highly concentrated products to the environment, a compromise on performance is not accepted. Moreover, the consumer even expects a better performance at low temperatures, since this equally contributes to resource efficiency.

To drive concentration it is necessary to offer cost effective solutions enabling the reduction of the surfactant level in the wash without compromising on performance and working effectively at low temperatures. This can be achieved by highly effective polymer technology supporting performance traditionally attributed to surfactants. Ethoxylated polyethylenimine can be used as a performance polymer for liquid detergents. The polymer contributes to an improved stain removal, especially on particulate and bleachable stains. At the same time it reduces the re-deposition of fluctuating stains. At the same time it reduces the re-deposition of fluctuating stains.
soil thereby preventing greying of textiles. The unique structure of the polymer guarantees a broad compatibility with liquid detergents. The efficiency is especially pronounced for highly concentrated liquid detergents, which typically deliver a lower surfactant concentration in the wash.

In this presentation, we introduce test formulations providing a high primary and secondary performance of concentrated liquid detergents at low temperature.

5. Functional Unit Dose Film Technology. T. Yogan, MonoSol LLC, IN, USA.

For the foreseeable future, soluble unit dose will be the fastest growing delivery format for laundry detergent products. A telling statistic from a 3rd party market research firm is that the share of the unit dose format is forecast to be almost 18% of the overall US laundry retail value by 2018. To-date, this growth has been driven by 1st generation unit dose films that provide convenience to the consumers, prevent overdosing, and enable flexibility to detergent formulators via single and multi-compartment pouches.

This presentation will build on the functional film concept first introduced at the 2012 AOCS meeting in Singapore. This platform is our vision of the next generation of unit dose innovation that incorporates active-functional ingredients in the water soluble film itself. This will further enhance effectiveness by allowing incompatible ingredients to be separated from one another by moving one or more actives into the film. The value proposition is the ability to provide even greater formulation flexibility to the detergent manufacturer while delivering the benefit of superior cleaning performance to the consumer.

6. Physical Chemistry and Performance Properties of Extended Chain Surfactants. G. Smith and H. Jennings, Huntsman Performance Products, TX, USA.

Conventional surfactant architecture consists of a hydrophobic tail group attached to a hydrophilic head group. As the size of the hydrophobic group increases, the surfactant becomes more surface active but also less soluble in aqueous solution. To avoid the solubility paradigm, we introduce a linking group of intermediate polarity between the hydrophobic tail and the hydrophilic head group. This new architecture is called an extended chain surfactant.

In the present work, a series of extended chain ether sulfate surfactants comprised of a straight chain alkyl group attached to propylene and ethylene oxide capped with a sulfate group were prepared. These PO based ether sulfate surfactants have a similar structure to emollient ethers, show large positive spreading coefficients at the air water interface and are non-irritating to skin and eyes. The effect of changing alkyl chain length and the degree of propoxylation will be discussed.

At the optimum salinity, extended chain surfactants promote ultra-low interfacial tension between oil and water. The ultra-low interfacial tension gives rise to enhanced solubilization of water insoluble materials. This large solubilization capacity can be used to give enhanced cleaning performance in laundry and hard surface cleaning applications. The ultra-low IFT can also be used for emulsification of various oils under low temperature conditions and for preparing Winsor IV microemulsions. Comparative studies of cleaning and emulsification by extended chain surfactants versus conventional surfactants will be presented.

7. Powerful, Sustainable Surfactant Designed to Replace Solvents. C. Gariepy and R. Masters, Stepan Company, IL, USA.

Unsaturated amide chemistry (N,N-dimethyl 9-decanamide), derived from metaalyzed natural oils, provides both surfactant and solvent-like properties which change the dynamics of cleaning. It is a low-HLB, low-VOC nonionic surfactant with broad utility in Consumer and Industrial applications, including kitchen degreasers, all-purpose cleaners, adhesive removal, and paint/coating removal. N,N-dimethyl 9-decanamide highlights include:

- Household Cleaners – at neutral pH, delivers better and faster cleaning performance at half the solvent loading compared to alkaline degreasers
- Adhesive Remover – at 5% in water, provides equivalent removal of various adhesives compared to 100% N-methyl pyrrolidone
- Paint Remover – at 5% in water, achieves safe and efficient removal of cured latex paint compared to 100% solvent systems that contain methylene chloride

Some specific product attributes of N,N-dimethyl 9-decanamide include a Kauri-butanol value >1000; boiling point =297°C; Biorenewable Carbon Index =75%; and formulating pH range of 3-12. This innovative chemistry can help formulators achieve their sustainability goals while improving cleaning performance.


Developing auto dish tablets is a highly challenging field in which one needs to combine a good tablet stability with a fast dissolution to quickly release and activate the performance ingredients in the wash liquor.

To unite these competing traits and all the other needed features into a single product, and additionally make it more sustainable was the challenge we met when developing ADW tablets. Key point of multi-functional ADW products is the intelligent combination of powerful ingredients such as optimized bleach systems, tailored enzymes, exclusive surfactants, and specialized polymers. The main drawback of tablets is the poor solubility.

A unique mixture including disintegrants results in a formula for low temperature programs that helps to achieve 30% energy savings while having 20% better performance in short cycles. The disintegrant enables immediate action of the ingredients with its 50% faster dissolution. The crosslinked polymer employed does not have the disadvantages of similar technologies, which leave residues and disturb the rinsing action while negatively impacting the tablet stability. Upon contact with water the swelling starts immediately and leads to a twice faster dissolution of the tablet and therefore an accelerated availability of the performance ingredients. At the same time, the tablet stability was investigated and adjusted to guarantee stable tablets even for long transport distances.

As 70% of the energy consumption is created in the use phase this is a significant step forward in our mission of achieving more performance (less energy).


‘Builders’, which function primarily as ‘Chelators’ are widely used in household products to control water hardness to improve the cleaning efficiency. Automatic dishwashing formulations normally contain a significant amount of chelator to improve cleaning performance by sequestering Ca and Mg ions from hard water. Regulations banning phosphates from automatic dish detergents have led to significant performance gaps in providing shiny, spot-free glasses after dishwashing. Current P-free technologies used for chelating functionality include polymers like polycarboxylates, carboxylate copolymers and small molecules, such as sodium citrate and trisodium salt of methylglucamideacetic acid. These technologies suffer from issues such as low efficiency, high cost-in-use, and lack of multi-functionality resulting in complex blends to deliver performance. We have developed a novel multifunctional polymer that can offer chelation, anti-scaling and anti-spotting properties, thus
effortless cleaning...

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improving formulation efficiency and simplicity. Auto-dishwashing performance of the polymeric builder in unit-dose powder and gel detergents was tested in water hardness of up to 400 ppm CaCO₃ (22.4°dH), based on calcium binding capacity and auto-dishwashing performance, the new polymeric builder was found to be more efficient than the leading acrylate polymers and small molecule builders. It was found that the spotting and filming performance was directly related to the level of the polymer in the formulation. Optimization of automatic-dish detergent formulation in chlorine gel, enzyme gel, and unit-dose powder or tablet format for best performance will be presented. This unique polymer builder is applicable to use in all the typical auto-dish formulation platforms.


Driven by regulation and environmental concern the global automatic dishwashing detergent market is on the way to non-phosphate formulations. It is especially challenging for multifunctional ADW products to meet the well-known excellent performance profile of the traditional phosphate builder. An excellent builder system contributes to cleaning, scale inhibition, rinse and drying performance, and at the same time does not induce corrosion of dishes.

For a long time, triplyphosphate seemed to be an ideal builder supporting the different functions. While various alternative builders are on the market, not all of them are able to resemble performance of phosphate. A substitution requires a careful combination of builder with polymeric cobuilder and surfactants. Methylglycin diacetic acid (MGDA) was shown to possess already many of these positive properties by an effective binding of hardness ions, a removal of scale as well as a positive contribution to the cleaning result. The existing gap to phosphate builder performance can be closed by combining MGDA with high performance dispersing polymers as well as effective carry-over surfactants. The potential corrosion properties of strong chelates on glass can effectively be controlled by specific formulation aids. In this presentation we introduce results of optimized formulations containing beside MGDA, high efficiency carry-over surfactants, and special ( antiscaling) polymers. We demonstrate that it is indeed possible to achieve an excellent performance with non-phosphate formulations without causing glass corrosion.


In many publications over the last two decades, attractive features of microwave-assisted organic synthesis such as speed of conversion, minimizing side product formation, and clean processing have been demonstrated on a few grams lab scale. High efforts have been taken within the last 15 years to transfer MW-assisted organic reactions into a commercially relevant scale. Apart from missing technological concepts, the relatively low efficiency in terms of energy conversion from MW radiation into heat was a major hurdle which has so far prevented up-scaling of this promising technology.

By utilizing a newly designed continuous operating system, we are able to demonstrate the high capabilities of microwave assisted processing at high temperature and pressure on production scale. Instead of heat transfer via comparably slow conductive methods radio frequencies provide pure energy to a reaction system which is turned into heat by all molecules at the same time with the speed of light. With the right reactor design we can proof the high energy efficiency of MW processing which is in contrast to the generally accepted view on this technology.

On the example of FAME we will highlight the potential for large scale microwave processing in continuous mode for chemical reactions – in several tons/day scales!


Measuring the reflectance of textile before and after washing is one of the most general methods for evaluating the detergency and there the textile is needed to be evenly soiled. This paper introduces an image analysis system which enables us to measure the amount of soil unevenly adhered to textile. The image analysis system was developed to apply to quantify not only dark-colored soil adhered to white fabric but also light-colored soil adhered to dark-colored fabric. The image capturing system was constructed using a commercially available digital camera which can be operated from the connected PC. Experimental specimens were prepared by spotting various kind of dyestuff solution on a piece of white cloth or by spotting white paint solution on a piece of navy blue cloth with changing the concentration and the spotting volume. K/S values of each pixel were calculated from the multiple regression equation standardized with the image data of Macbeth color checker which is capable of relating RGB values to XYZ values. The total amount of K/S values of each pixel (ΣK/S value) showed good correlation with the amount of the adhered soil for dark-colored soil on white fabric. The amount of white soil adhered to dark colored substrate could be calculated by reversing RGB values of the image data. Conclusion is that the newly developed image analysis system can be applied to wide use including light-colored soil adhered to dark-colored substrate.


Changes in US machine design over the last few years has led to decreased wash water volumes during the cycle. This change has both positive and negative effects. For example, raw materials which function better under more concentrated conditions can be considered but also problems such as bacterial contamination which arises during, prolonged use of non–bleach containing liquid detergents, and cool wash temperatures of typically 86°F/30°C in HE frontal loading washing machines, is now prevalent. This has led to concerns over the potential for the persistence of microbiological contamination and malodour generation on both fabrics and within washing machines following the laundry cycle.

Studies have shown that levels of 150ppm peracetic acid generated in situ from TAED (tetraacetylectylenediamine) and persalt were sufficient to reduce the loading of bacterial strains on fabric substrates and 'in wash' water by greater than 5 log units (>99.9%) reduction in the ASTM E2406-09 and E2274 tests at 86°F/30°C with a 12 minute contact time.

Results will be presented that illustrate how initially clean automatic washing machines can become heavily contaminated with bacteria and fungi over 20 cycles using standard soiled loads in the absence of bleach containing detergent at low temperature.

The studies show that biofilm formation can be controlled only when sufficient concentrations of bleach activator, and hence peracetic acid, are used. Additional benefits for activated bleach system inclusion include the effect on malodour, whiteness revival of dingy white items and the preservation of fabric whiteness which will also be presented.


In many parts of the world, water shortage severely affects many lives and the collection of or access to usable water – as well as a steady water supply – is an issue. In these regions washing clothes is done by hand, and it’s a process that can take up one-third of the household’s water supply. With the restricted access to water, doing laundry becomes an issue for women, who typically are in charge of collecting water and cleaning the clothes.
In addition to the time spent accessing water, doing laundry takes up a lot of time and effort – time these women could and would rather spend on other chores. Understanding this consumer behavior leads to new insights that enable us to develop solutions that require less water and less effort, and help make a chore easier for the consumer.

Through consumers testing and local research on washing habits around the world, we have confirmed that multi-enzyme solutions for hand wash help consumers save water and free up time. We will demonstrate how these multi-enzyme solutions can partly replace conventional chemistry in typical hand washing detergents and at the same time allow consumers to reuse water, wash in ‘grey’ water, or do fewer rinses while still getting their clothes clean.

Wednesday, 8 October 2014


Modern consumers expect more than clean clothes from a laundry detergent. They are increasingly opting for products that offer a unique wash and wear experience with multi-faceted sensorial benefits. Their favorite clothes should look new as long as possible with vibrant colors, feel soft to touch, and carry a lasting fresh scent that provides an additional sphere of cleanliness.

Historically, primary cleaning has been the major attribute for conventional detergents, leading to a heavy reliance on surfactant and enzymes packages. Lately, innovative formulators are striving to go to market with 2-in-1 detergents that combine cleaning with care attributes such as fabric softening, fabric treatment, and fabric modification.

This presentation describes recent formulation developments using specially additivated detergents that help modern formulators reach the convenience and wellness attributes sought by today’s consumers. Particularly, the showcase will share benefits of certain innovative additive technologies in enhancing the fabric care aspect of a formulation. These technologies have been found to provide softening benefits in fabric softener formulations but also in 2-in-1 liquid laundry detergents. We will also show how some technologies can protect colored clothes by preventing dye from bleeding from one cloth to another. Finally, we will share information on shape retention using light duty laundry on wool.

16. Laundry Paradigm-breaking: The Challenge of Simultaneously Improving Cleaning and Fiber Care. N. Lant1 and A. Franco2, P&G Fabric Care, Newcastle, United Kingdom, P&G Fabric Care, Geneva, Switzerland.

Stain removal is the key measure used to compare laundry detergents, but consumer acceptance is driven by several vectors including appearance and freshness. Fabric appearance deserves more attention, especially for heavy duty detergents, to overcome ‘1st wash anxiety’, i.e. the deep concerns people have about new items losing their integrity after laundering.

We can improve the fiber care profile of detergents by listening to the fashion and textile industries and using the insights to develop new products which cater for emerging trends in washable apparel. This calls for our industry to embrace emerging fibers, fabrics and finishes, and ensure that we care for these alongside our historical cotton and polyester targets. For example, by giving more consideration to elastane and wool fibers, printed textiles and finishes that impart softening, easycare or soil repellency benefits.

Machine-washable fabrics show significant loss of integrity when washed in traditional laundry powders, with issues including dye fading, hue shift, seam abrasion, crustauration, whiteness loss, poor print integrity and shrinkage. We can mitigate many of these issues with new products that deliver improved fiber integrity and strong performance in gentle cool-water washing conditions. This refocusing can lead to significant improvements in fabric appearance after multicycle washing and a 2x increase in the lifetime of some garments compared to traditional laundry detergents on the basis of colour, print and shape integrity data. However, more progress is needed in the development of new fiber-care technologies if ‘first wash anxiety’ is to really become a thing of the past.


The amino silicone-based emulsion is used as a textile treating agent to provide good flexibility and texture to cloth. However, when general amino silicone adheres to textile, surface of the textile indicates water repellency. In order to maintain the water absorbency of textile, the amino polyether silicone which is synthesized by amino silicone and epoxy polyether compound is used. But, this type of silicone is easily washed out from textile after the laundry, because of low wash durability.

In this study, we improved amino polyether silicone further, synthesized new amino polyether silicone having blocked polyisocyanate (BPI) group. By heating this BPI amino polyether silicone for several minutes at 120 to 150°C, the rubber-like film was formed. Moreover, this silicone was able to be made into the emulsion with emulsifier. The amount of silicone on broadcloth (polyester 65%/ cotton 35%) treated by this silicone emulsion was more than the one treated by conventional amino polyether silicone emulsion. And the cloth maintained good flexibility and water absorbency even after the laundry. Moreover, when laundry was repeated, most of BPI amino polyether silicone was remained on the cloth, and not lost greatly. On the other hand, amino polyether silicone was almost washed out from the cloth after first laundry.

The BPI amino polyether silicone is available for a textile treating agent with high wash durability and water absorbency that are conventionally incompatible. And, it is useful for a binder to fix functional reagents onto textile.


Liquid detergents are on the rise in many parts of the world. Brands as well as private labels are actively launching new liquid products every year in order to meet the consumer preference for liquids and capture market share.

While enzymes are pervasive in powder formats due to their ability to elevate performance on difficult stains consumers struggle with, they are not as widely used in liquids. This is because liquids pose a unique challenge due to the inability to separate ingredients, making it difficult to stabilize enzymes in this format.

Solving the stabilization issue of enzymes in liquid detergents has been a focus area for many formulators as enzymes have been a key performance enhancer and claim enabling to drive consumer loyalty. Traditionally formulators have used chemistry, such as boric acid, to stabilize enzymes in liquid formulations. While boric acid has been a great tool to stabilize enzymes, it is under heavy regulatory scrutiny.

Alternatives to boric acid are needed and this is becoming even more relevant as large retailers, such as Walmart and Whole Foods, push for a ‘sustainable chemistry’ agenda.

We will present alternatives to using boric acid as an enzyme stabilizer to help people recognize there are good alternatives that allow enzymes to be more commonly used in liquid detergents and also appeal to the concerns of retailers and regulatory bodies.

Sustainable and green technology is a continuously evolving group of methods or materials, from techniques for generating energy to non-toxic cleaning products. Though trends are different in USA & Europe than Asia. But people worldwide are concerned on use of environmentally safe product. Today, due to customers demand the manufacturers of laundry detergents tend to produce products, which, ensure less raw material consumption, less resource consumption for production and transportation—all attributes favoured by ecomarking and ecolabelling. The use of biotechnology for finding green solutions in case of laundry detergents has been studied at several places by researchers in the field across the globe.

The current study is based on product formulations known as Tier-three, having low surfactants, mostly used by majority of Indian consumers. The study has once again confirms that enzymes can be widely used in detergent formulations to reduce the environmentally negative load by reducing surfactant content. The optimized formulations make it possible to; replace costly and toxic surfactants, eliminate phosphate, replace other toxic or harmful substances. It is estimated that at least about 25–30 reduction in carbon footprints is possible. Enzyme based formulations are equally effective alternative even in cheaper tier III products marketed in India and other Asian countries at similar cost. Through this study an action plan is suggested so that all eco-friendly detergent products may be popularized in India.


As consumer wash habits shift towards more sustainable processes, e.g. washing at lower temperatures and with less water and detergent consumptions, maintaining quality and cleaning of laundry items become a more challenging task. Prevention and removal of greasy soil, as well as maintenance of whiteness of laundry items are two key care-abouts, rendering from studies of consumers buying fabric and homecare products. Visualizing application problems is a core technology to guide solution strategies, as well as in relating to customers to convey the value of our solutions. By imaging via real-time confocal fluorescence and electron microscopy techniques, we here zoom in on these two problem matters: characterizing the problem manifestations, and showing how specific enzymatic solutions are strategies to safeguard these important consumer needs. We shall see how lipid based soil adheres to textile and is removed, assisted by lipases that undergo a characteristic scheme of surface diffusion. Also, we will demonstrate how including cellulases in a wash process will modulate cotton surface topology on a nanometer scale, in turn bringing about a reduction in uptake of different classes of particulate soil during a subsequent wash process; soil that would otherwise damage whiteness of the laundry items.


The exponential increase in genomic information, the advent of automated cloning and the precipitous drop in oligonucleotide synthesis and sequencing costs had led to a myriad of opportunities for automated discovery and engineering processes for the development of new catalysts for cleaning. Our implementations have reduced the development time for new catalysts for the home care market by up to a factor of 5.

We will discuss examples of how molecular biology combined with bioinformatics and robotics drives this process. Protein engineering now combines complete evaluation of every individual amino acid position in a molecule with computational techniques which guide combinatorial strategies leading to multiple new catalysts in very short turn-around times. We will present case studies drawn from both fuel ethanol and laundry enzyme applications. In both cases we will show how delivering these novel catalysts can contribute to delivering environmentally sustainable products for our customers and the general public.

22. Improved Fluorine-free and Solvent-free Silicone Emulsions, and their Applications in Household Care. R. Becker and M. de Schmidt-Camilleri, Wacker Chemie AG, Munich, Germany.

To protect porous surfaces such as fabrics or wood against water or water-based stains, emulsifier-free silicone emulsions have been developed which are free of solvents or fluorine-containing products. When applied to surfaces, these silicone-based products do not require a curing step and only need to be dried at room temperature.

If used as a wash impregnation on fabrics, the product can be applied in the rinse cycle of a washing machine after the regular wash process. After drying at room temperature or in a tumble dryer, the treated fabric shows very good water-repellency. The new products are especially useful for refreshing the impregnation of outdoor clothes.

For impregnating hard surfaces such as wood, stone or leather, special guide formulations have been developed which result in significantly improved water-repellency for these surfaces.

23. Combining the Benefits of Alcohol Ethoxylates and Alkyl Polyglycosides in Cleaner Formulations. C. Boehme1, D. Kischke2, A. Bohrn-Chastang3, and G. Merkle*3, 1BASF Personal Care and Nutrition GmbH, Monheim, Germany, 2BASF Personal Care and Nutrition GmbH, Düsseldorf, Germany, 3BASF SE, Ludwigshafen, Germany.

The driving forces in the home care market are convenience, safety, performance and sustainable solutions. Claims to support these trends like ‘environmentally friendly’, ‘easy to use’, or ‘mild to surfaces’ are directly linked to performance effects provided by cleaner ingredients.

Alcohol ethoxylates based on slightly branched C10 alcohols show excellent cleaning properties even on heavily oily soils. A combination with C8C10 alkyl polyglycosides in hard surface cleaner formulations can significantly improve foam stabilization, gloss retention and plastic compatibility. These benefits enable premium products with claims supporting the most important trends and needs in the hard surface cleaner market.

Whether looking for powerful high-end-cleaning solutions or sustainable and safe trigger applications – combinations of these special surfactants provide a broad range of performance effects for all kind of consumer demands.

It’s your choice!


The competitive arena for ingredients for home care products is changing rapidly. Today, detergent formulators can select from a multitude of surfactant options, polymer grades, enzymes, complexing and bleaching agents, solvents, etc. for use in the final cleaning product. The current initiatives of the detergent industry to increase the sustainability of fabric care category products, e.g. by compaction and low temperature application, generate significant interest in new and innovative surfactant products with tailored properties.

Alcohol-based surfactants are an ideal product category when designing surfactants with optimized structures. The various fatty alcohols coming from different sources and processes offer a
diversity of chemical structures. The ‘alcohol toolbox’ available to surfactant makers today consists of oleo, petrochemical and coal based feedstock alcohols. The structure of the alcohol hydrophobe significantly affects surfactant aggregation properties and performance. By choosing alcohols with the right branching patterns it is possible to accomplish new requirements, regulatory and performance related.

In recent studies on nonionic surfactants, the impact of selective alcohol branching on wetting, foaming and cleaning properties was investigated. The results showed that surfactants with branched alcohol hydrophobes can provide technical benefits and value to the formulator.

Examples on flexibility in tailoring structure and performance of alcohol-based surfactants include:

- Surfactants for Auto Dish cleaning – C<sub>11</sub> semi-branched alcohol alkoxylates with good wetting properties together with low foam.
- Surfactants for Fabric Care from unique Fischer-Tropsch based C<sub>12-13</sub> alcohols with interesting performance profile.

25. Synthesis of Dialkylamidoamineoxide Type Zwitterionic Surfactant Having Dual Function of Cleaning and Softening Effects. D.S. Han<sup>1</sup>, J.C. Lim<sup>2</sup>, and D.W. Kim<sup>2</sup>, <sup>1</sup>Aekyung Advanced Institute, Daejeon, South Korea, <sup>2</sup>Dongguk University, Seoul, South Korea.

It is very important to ensure mildness to the skin in the fields of all household and cosmetic products, since these products are to be in direct or indirect contact with the human body. In this study, amine oxide type surfactants of high molecular weight (800~1,600) having a dialkyl amide chain were synthesized mainly for detergent and cosmetic formulation purposes where solubility of newly synthesized surfactants was controlled by addition of polyethylene-oxide and/or propyleneoxide. The characterization of a surfactant was performed by <sup>1</sup>H-NMR and <sup>13</sup>C-NMR and the composition was compared with the expected composition calculated from the equilibrium distribution of feeding materials. The physical properties of newly synthesized surfactants such as CMC, surface tension, interfacial tension, and contact angle were measured and compared with those of PLA and AQ. Since the newly synthesized surfactants show characteristics of a nonionic surfactant in an alkaline condition, while showing characteristics of a cationic surfactant in a neutral pH condition, they can serve as a dual function surfactant in a single molecule having cleaning and softening effects depending on pH variation of the aqueous solution. Their dual function characteristics depending on pH were investigated using QCM-D and zeta potential measurement with its related cleaning and mildness effects. Detergency test has shown that newly synthesized surfactants provide moderately good detergency at a pH condition above its isoelectric point. On the other hand, softening effect evaluated by a touch test indicated that new surfactants show good softening effect at a pH condition below its isoelectric point.

26. Glucamides: The Next Generation of Sugar Surfactants for the Home Care Market. C. Cohrs<sup>1</sup>, P. Klug<sup>1</sup>, G. Nunes<sup>1</sup>, and G. Kume<sup>2</sup>, <sup>1</sup>Clariant Produkte (Deutschland) GmbH, Frankfurt, Germany, <sup>2</sup>Clariant International Ltd., Muttenz, Switzerland.

Glucamides, or N-Methyl-N-Acyl Glucamines, are a new group of highly renewable, nonionic sugar surfactants. They are readily biodegradable and have an excellent ecological profile, i.e. they belong to the few surfactant classes having no aquatox labelling.
29. Vegetable Oil Ethoxylate Surfactants: Physical Chemistry and Performance Properties. G. Smith and G. Watkins, Huntsman Performance Products, TX, USA.

Modern surfactants are based on either naturally derived or synthetic feedstocks. Natural surfactants are typically based on alcohols derived from coconut or palm kernel oil whereas synthetic surfactants are based on ethylene derived from gas, oil and coal. Synthetic surfactants are not based on renewable feeds and in recent years there has been increased demand for more sustainable alternatives. While natural alcohol based surfactants based on coconut or palm kernel are more sustainable, there has been increased concern about destruction of the rain forest and resulting loss of biodiversity. This presentation will discuss the physical chemical properties of vegetable oil ethoxylates based on different triglycerides like soy, canola and algae at low cost, locally grown alternatives to conventional coconut and palm based surfactants.

A series of vegetable oil ethoxylates (VOE) were prepared by reacting different natural oils like soy, canola and algae with ethoxylated glycerin. The properties of vegetable oil derived surfactants have been compared to more conventional natural alcohol ethoxylates (AE). In general, vegetable oil surfactants have a lower CMC, cloud point and foam potential than AEs due to the longer alkyl chain length. Surface and interfacial tension depend on the alkyl chain distribution and the degree of polymerization on the polyol. Vegetable oil derived surfactants show good detergency in single surfactant and multi-component systems.

Thursday, 9 October 2014

10.45–11.15

30. Biodegradable Fabric Softener Active with Improved Dispersibility. M. Hisamoto1, D. Parrish1, and D. Träumer2, 1Evonik Corporation, VA, USA, 2Evonik Industries AG, Essen, Germany.

Biodegradable fabric conditioners derived from triethanolamine (TEA) and fatty acid raw materials have been used globally for over 20 years. Like its predecessors, esterquats are typically synthesized from tallow derivatives. The resulting products, which are solids or pastes at room temperature, must be stored, shipped, and processed at high temperatures, usually above 50°C. Liquid TEA esterquats manufactured from highly unsaturated vegetable oils and tallow oleic fatty acid are not suitable for the manufacture of traditional fabric softener dispersions due to formulation instability. In order to reduce the energy input needed to heat raw materials and the time input needed to cool finished dispersions while allowing for the manufacture of robust, stable products, TEA esterquats which are liquid, readily dispensible, and formable at ambient temperatures have been developed. The video will demonstrate the ease of dispersibility of this liquid TEA esterquat.

51. Deposition of Actives on Fabric During Laundering. R. Panandiker and M. Sivik, Procter & Gamble Company, OH, USA.

Conventional laundry detergents are used for removal of soil from the fabrics. Over the past two decades, there is an increasing desire to deliver new benefits such as improved feel, better appearance and long lasting fragrance. These benefits require deposition of actives on the fabric during the laundering process. As such, the size of the benefit is limited by the efficiency of deposition. This is particularly important in premium laundry detergents which contain a high level of surfactants, designed for effective soil removal.

Coacervate technology has been known in the personal care area for many years as a means to deposit silicones. The technology uses a cationic polyelectrolyte that can interact with the anionic surfactants to produce liquid/liquid phase separation. This presentation examines the use of this technology in the laundry detergent and fabric softener context. Using ellipsometry and quartz crystal
microbalance, we studied the interaction of cationic polymers with anionic actives within the detergent products. We examined the effect of polymer structure on coacervate formation and how it affects its deposition on the surface. The presentation will show how the interaction can be leveraged to maximize the deposition of actives on the fabric during the laundering process.

The poster also points out the challenges accompanying the use of this technology in fabric care application.


Antifoam is a necessary additive in detergent, and it can keep the foam at an acceptable level. It can also make washing process more efficiently, and decrease or eliminate the effect of foam on our surrounding environment.

From the view of surface tension of the designed molecular and different people’s washing habits, series of new structure of active compounds are synthesized, and they are different from that of PDMS, which is the main component of traditional defoamers. The new structure of defoamers can meet the different requirements for foam control when people wash by machine or by hand.

Besides, according to our experiments, we analyze the possible reasons for new structure of active compound’s excellent foam controlling performance from the view of ‘entry’, ‘spread’ and ‘similarity of molecular structure’.

We have compared foam controlling performance of new active compound defoamer with that of PDMS from water hardness, washing temperature, kind of carrier, dosage, aging experiment and so on.

It shows us that new antifoam has such properties as being efficient, environmentally friendly, easily degradable. That is our common choice.

35. Use of Silicone Foam Control Agents in Liquid Laundry Detergents. M. Severance, Dow Corning Corporation, MI, USA.

The control of foam generation during the consumer laundry process is an important factor to ensure proper washing machine operation and obtain the desired level of cleaning, as well as to provide a positive signal to the consumer. Organic fatty acids at levels of 2–5 weight % are commonly utilized in liquid detergents to accomplish this.

Recent trends of detergent formula compaction and lower wash temperatures, as well as fatty acid supply chain considerations, have made it wise to consider alternative ways to provide this laundry foam control.

Silicone antifoam concentrates are shown to provide highly efficient foam control at levels <0.3 weight % in a variety of washing conditions. The use of silicone antifoams offers multiple benefits such as flexibility for further detergent formula compaction, reduced water levels, higher concentration of cleaning components, and potential formulation cost savings.

34. New Polymer Technologies, as a Most Effective Mean, to Thicken a Wide Variety of Clear Home Care Liquid Formulations. E. Everaert, B. Kroom, P. Brand, P. Gillette, A. Picker, and P. Cowan, 1 Ashland ASI Global Hair & Home Care R&D, Zwijndrecht, The Netherlands, 2 Global Molecular Science, DE, USA.

Increasingly, many home care applications step away from powder formulations to focus on more complex liquid formulations. Liquid formulations will often contain technologies that will impair the formulation overall rheology profile rendering them too “water-look”. Rebuilding the viscosity profile to deliver the right product cues to the consumers is amongst top needs. Whereas some current technologies like cellulose or acrylate-based can be used, they will fail to thicken & keep clarity in the more complex liquid formulations.

In this work, we will present new highly modified polysaccharides technologies that have proven to be most efficient to build the desired viscosity (low use level required) and keep full clarity of the most complex liquid home care applications. More over those new polymers offer the opportunity for better compatibility with a wide range of surfactant mixes and use level ranges, salts & wide pH range.


Formulations have conventionally relied on the self thickening of surfactants and the use of salts to generate low-cost thickening of liquid detergents. Modern detergent formulators are more and more shifting away from these traditional thickening mechanisms. They are using new generations of rheology modifiers to formulate easier to manufacture liquid detergents with an optimized cost/performance balance, often even at reduced surfactant levels, and with additional benefits.

Current trends in liquid detergents are pushing formulators beyond simply providing a splash-free, smooth pour and proper dosing of the detergent. The state-of-the-art is progressing to more complex rheology profiles that are designed to complement the detergent’s proper pour and dosing with additional benefits through the suspension of visual cues or specific ingredients such as encapsulated fragrance particles.

This presentation describes recent formulation developments using specialty rheology modifiers to generate the complex and challenging rheology profiles able to create liquid detergents with such specific and promising additional features.


Detergent companies are always looking for ways to improve the structuring of concentrated liquid detergents. Where limited amounts of water are available and high active ingredients need to be present, challenges surface with regards to e.g. formulability, pourability, stabilization, suspending particles whilst improving sustainability.

Valorizing a sidestream of an agro industrial plant led to the development of a patented novel and unique structurant. This structurant is a cellulose material of specific structure with a distinct shape and size: it comprises of particles having the form of platelets that build spiderweb-like networks.

Two structuring properties are desired: shear thinning capabilities and microbead and/or particle suspension capabilities. The novel structurant offers both properties in one material: shear thinning capabilities and a distinct yield point. Shear thinning capabilities are typically characterized by the pouring viscosity and the ratio of the pouring viscosity and low-stress viscosity values. This novelty has a higher zero shear viscosity than traditional structurants. Moreover, it is easier to handle than most viscosifiers in use and much more tolerant towards varying formulations since its ability to build up viscosity is not affected by pH, temperature or electrolytes. Hence, this structurant can be used to structure liquid laundry or dishwasher detergents, toilet bowl cleaners (acid Compatibility), scouring creams or personal care products (suspend particles).

The company that developed and produces the structurant is backwards integrated and therefore offers its partners security of supply. The structurant is produced out of renewable resources that show an abundant availability and are not competing with food production.
Executive Committee

■ Manfred Trautmann, Conference General Chair, Managing Director and Board Member, WeylChem Switzerland AG, Switzerland.

Manfred Trautmann is a German national, based in Muttenz, Switzerland. He graduated from University of Darmstadt as a Chemical Engineer. Trautmann served in various functions at Hoechst in the Engineering Department, as Application Manager for Detergents and Personal Care and later was responsible for sales and marketing of the Detergents and Personal Care Business of American Hoechst/Hoechst Celanese, North America, based in Charlotte, NC (1986–1996). From 1996 to 2000, Trautmann held Global Marketing & Sales positions for the Detergents, Personal Care and Plant Protection Additives Business. In 2000, he became Head of New Business Development and in 2007 took over the position of global Head of Marketing & Sales of the BU Detergents & Intermediates. Trautmann was appointed in 2008 to become the BU Head for the Detergents and Intermediates Business of Clariant. This business was sold in 2013 to International Chemical Investors (ICIG) and Trautmann assumed the role of Managing Director and Board Member for WeylChem Switzerland.

Manfred Trautmann has been an active AOCS member for many years, dating back to the early ‘80s, and has presented several papers at AOCS annual meetings as a speaker and/or co-author, served as member-at-large on the AOCS Governing Board since 2010 and was elected AOCS Vice President in 2014. He served on the Executive Committee for the World Conference on Fabric and Home Care (Montreux) in 2002, 2006 & 2010 (Vice Chair), Singapore 2012 (Vice Chair) and manages the Montreux event in 2014 as General Chair.

■ Keith Grime, Past Chair, President, JKG Consulting LLC; Adjunct Professor, Northwestern University, AOCS Past President, USA.

Keith Grime retired from Procter & Gamble in 2007 as Vice-President of Corporate R&D, and then set up his own consulting company JKG Consulting LLC. He consults with many corporations, ranging in size from venture to multinational, in the chemical and consumer products sectors and across many business categories. His consulting work focuses on R&D effectiveness and innovation strategy and its integration into business development strategies, including alliances and partnerships.

Grime is also an Adjunct Professor at Northwestern University where he teaches Management of Product Innovation in the Master of Product Design & Development program at Northwestern’s McCormick School of Engineering. He also teaches Innovation Management in the Executive Education program jointly with the Engineering School and Kellogg School of Management at Northwestern.

Grime has extensive experience in the fabric and home care business having spent many years as Vice-President of R&D in the global Fabric Care business at P&G.

He has been a member of the AOCS Board of Governors for AOCS since 2004 holding several positions. He served as Vice-President, President and Past President from 2009 to 2012.

Keith is a frequent speaker at innovation forums and is no stranger to the World Conference on Fabric & Home Care. He has served as speaker on several occasions, has been a session chair, an Executive Committee member, and a co-chair for the Montreux conference since 1992. He led the development of the Singapore conference and was the General Chair of the inaugural meeting in 2012. He will be the General Chair again at the World Conference on Fabric & Home Care in October 2016.

■ Patrick Donnelly, Chief Executive Officer, AOCS, USA.

Patrick Donnelly, Ph.D. joined AOCS (American Oil Chemists’ Society) as its Chief Executive Officer in 2012. Prior to this Dr. Donnelly worked for over 20 years with, and for, major technology providers in the biotechnology, agrochemical and chemical sectors to advance science and regulatory policy. He began his career in Washington, DC as a Congressional Science Fellow working for the Agriculture Committee of the U.S. House of Representatives, and later served on the staff of the U.S. Senate Committee on Agriculture, Nutrition and Forestry. Dr. Donnelly holds an M.S. and Ph.D. in Reproductive Physiology from West Virginia University. He completed his undergraduate work in Resource Development majoring in animal science at the University of Rhode Island.

■ Andrés Jaffé, Senior Vice President, Global Home and Personal Care Business, BASF SE, Germany.

Andrés Jaffé was born in Caracas, Venezuela on 30 December 1958. From 1977, he studied electrical engineering at Simon Bolívar University in Caracas, Venezuela. In 1988, he received a Master of International Management from the American Graduate School of International Management in Phoenix, Arizona, USA. Andrés Jaffé is married and has 5 children.

Over 24 years, Andrés Jaffé held various positions in Marketing, Procurement and Internal Marketing & Sales Excellence within BASF before becoming Senior Vice President for the Global Key Account Management Organization Home and Personal Care Business in 2013.

■ Thomas Müller-Kirschbaum, Corporate Senior Vice President, Henkel AG & Co. KGaA, Germany.

Thomas Müller-Kirschbaum is the global head of Research, Development and Technology for the Laundry and Home Care Business of Henkel. In addition, he acts in two corporate global responsibilities for R&D and sustainability as chairman of the Henkel R&D Committee and as co-chair of the Henkel Sustainability Council. He acts in various national and international research related functions, e.g. as board member of the Research Committee at the Association of the Chemical Industry in Germany, as chairman of the committee of the Fraunhofer-Institute for Applied Polymer Research and as Honorary Professor for Innovation Management at the Niederrhein University of Applied Science, Germany. Thomas received his diploma in physics and his Ph.D. in natural science from the University of Cologne.

■ John M. McIver, Director, Fabric & Home Care, Strategic Innovation & Technology, Household Care Business Unit, The Procter & Gamble Company, USA.

John McIver received his Bachelor’s degree training in Chemistry from the University of North Carolina, Wilmington and completed a Ph.D. in Organic Chemistry from Duke University. He joined Procter & Gamble in 1985 in the Corporate Technology Division. His formative years at P&G were all spent in the Corporate R&D organization, where he directed upstream Technology Programs intended for broad use across the company. He held several management positions within Corporate R&D before moving into a leadership position in P&G’s Corporate Biotechnology organization. Following this assignment, he moved to the Household...
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Care business unit, where he has held several positions in Fabric & Home Care Technology, culminating in a transition to a more blended role in Strategic Innovation & Technology in 2009. More recently, in addition to his Fabric & Home Care responsibility, John has assumed a leadership role in Corporate R&D.

Mike Parkington, Senior Vice President, Home Care R&D, Unilever R&D Port Sunlight, United Kingdom.

Mike joined Unilever over 25 years ago following a MA & DPhil in Inorganic Chemistry. He has assumed a number of senior roles across Personal Care and Home Care R&D which included two expatriations.

In his current role, Mike leads the Home Care R&D team and works with the Category Leadership to define the size and shape of the R&D investment required to deliver competitive, profitable business growth. He is accountable for the delivery of the short, medium and long term innovation programme which requires frequent working with external partners across academia and the chemical industry.

Married to Lynn, they have two daughters and a son. Mike’s interests include: Everton Football Club, cricket, running and walking in the Lake District region of the UK.

Masaki Tsumadori, Research Fellow, R&D, Director, Kao Eco-Lab Museum, Kao Corporation, Japan.

After a distinguished career of contributions to Kao’s fabric care business through the Research & Development Division, Masaki Tsumadori is currently a Research Fellow of the Strategy Research of the Kao Corporation and the director of the Kao Eco-Lab Museum, a facility built to support communication about the environment and Kao’s technological contributions.

Tsumadori began his career at Kao Corporation in 1977, working as a research chemist for developing fabric and home care products in Tokyo, Japan. He subsequently held senior positions in areas such as Research & Development, including manager of hard surface cleaners from 1987 and director of fabric care products such as laundry detergents, fabric softeners and bleaches from 1997. During the years 1997 - 2002, he played key roles in the development and launch of powder and liquid laundry detergents in Japan and Asian countries, including the Attack brand. He was appointed vice president of Global R&D, Fabric and Home Care of Kao Corporation in 2002 and subsequently became a Research Fellow in 2008.

He has recently participated in the following committees and associations:
- Member of Governing Board of American Oil Chemists’ Society
- Board of Directors of Japan Oil Chemists’ Society
- Member of Technical Committee of Japan Soap and Detergent Association
- Director of Japan Research Association for Textile End-Uses
- Masaki Tsumadori earned a Master’s Degree in Polymer Chemistry from the Nagoya Institute of Technology in 1977.

Session Chair Biographies

Michael Dreja, Director International Research, Henkel AG & Co. KGaA, Düsseldorf, Germany.

Dr. Michael Dreja (born in 1970) is heading since 2010 the International Research in the Laundry & Home Care Business of Henkel AG & Co. KGaA, Düsseldorf, Germany, where he oversees the development of new raw materials with external partners including industrial suppliers and universities.

Shelagh R. Muir, Vice President R&D Home Care, Unilever R&D Port Sunlight, United Kingdom.

Shelagh Muir joined Unilever 18 years ago, after she earned a Ph.D. in Biochemistry. Her career has been focused on R&D, where she has worked across all of Unilever’s categories including Foods, Refreshment and Personal Care. In her current role, Shelagh leads the Home Care Discover R&D team, responsible for transformational and disruptive technologies which delight consumers and deliver profitable business growth.

Shelagh is married to John. They have 4 year old twins. Her interests include all things outdoors including long distance running and hill walking.

Scott Power, DuPont, USA.

Since 1983, as a member of Genencor Inc. he has served as Director of Protein Chemistry, V.P. of Global Research, and leader of various projects in Pathway Engineering, Protein Expression, Protein Engineering and Vaccine Development. He is the inventor on over 50 patents. Dr. Power received his B.A. from Reed College, his Ph.D. in Biochemistry from Rice University in Houston, Texas and his Postdoctoral NIH-fellowship at the University of Colorado in Boulder. Scott is currently a DuPont Fellow and responsible for all R&D programs in DuPont Industrial Biosciences.
Katja Scharpwinkel, Managing Director for BTC Europe GmbH, Germany.

After joining the BASF group in 2010, Katja Scharpwinkel took over in February 2012 the role as Managing Director for BTC Europe GmbH (part of BASF group) being currently responsible for the distribution business with small and medium-sized customers in Europe. Prior to this role, she worked for three years as account manager and head of sales for the lubricant industry at Ciba Specialty Chemicals starting in 1997 and joined Cognis in 2000 where she held various roles as Director in marketing, sales and key account management functions in the European Home and Personal care industry.

Mrs. Scharpwinkel was born in Hagen, Germany in 1969. From 1988 to 1992, she studied chemistry at the Westfälische Wilhelms-Universität in Münster, Germany and received her diploma in 1994. She earned her PhD in organic chemistry in 1996 from the university in Münster. Katja Scharpwinkel is married and has one daughter.

Hans Jürgen Scholz, Managing Director, WeylChem Wiesbaden GmbH, Germany.

Dr. Hans Jürgen Scholz, German Citizen, born in 1958 studied Chemistry at the University of Wuerzburg Germany. He received his Ph.D. degree from University of Wuerzburg in 1986.

He started his professional carrier in 1986 with Hoechst/Clariant in Research of the Division Surfactants and Auxiliaries. He held several positions in Application Department as Project Manager, in Marketing as Global Key Account Manager, and New Business Development being responsible for Project and IP Management within the BU Detergents of Division Functional Chemicals.

From 2007 till 2013 he was Director of Application Development within the Business Unit Detergents & Intermediates of Clariant, based in Frankfurt, Germany. After sale of the Business Unit D&S by Clariant to the International Chemical Investors Group (ICIG) effective January 2014 he is one of the managing directors of WeylChem Wiesbaden GmbH in addition to his function as head of the Application Development Department.

Hans Jürgen Scholz is married, with 4 grown children (3 daughters and 1 son).

Nilesh Shah, Senior R&D Director, Technology Center Site Leader, Advanced Materials, The Dow Chemical Company, USA.

Nilesh Shah is the Senior R&D Director for the Consumer and Industrial Solutions business of The Dow Chemical Company. He is also the site leader for Dow’s Spring House and Northeast Technical Centers.

After joining the Rohm and Haas Company in 1985 as a research scientist for the Plastics business, he held positions of increasing responsibility in research management, leading Polymer Synthesis and Exploratory Polymer Research. From 1999 to 2002, Shah held commercial roles in the Architectural and Functional Coatings business, with responsibility for strategic planning and marketing before returning to research in 2003 as a global technology director. In this role, he led research and regulatory affairs for the Consumer and Industrial Specialties business followed by the Process Chemicals and Biocides business. He transitioned to his current role after The Dow Chemical Company acquired Rohm and Haas in April 2009.

Shah graduated with a Bachelor of Science in chemical engineering in 1979 from Jadavpur University in Calcutta, India. He then went on to receive his doctorate in chemical engineering from the University of Massachusetts at Amherst. Shah is a member of the American Chemical Society and Tau Beta Pi.

Hiromitsu Takaoka, Director of Research Planning & Administration Dept., Research and Development Headquarters, Lion Corporation, Japan.

Hiromitsu Takaoka is the Director of Research Planning & Administration Department at Lion Corporation, Japan. He joined Lion Corporation in 1988 as a research chemist in oleochemical R&D. From 1997 to 2002, he belonged to Fabric Care R&D as a product development manager of laundry powder detergents. He developed a detergent with an enzyme suitable for cold washing and the first detergent that focused on malodor control for indoor drying.

After his experience in business planning at the company headquarters, he was named Director of Product Development for the International Division in 2006. In this role, he led product development of Personal Care and Household Care products for Asian countries outside of Japan.

From 2008 to 2013, he was the Director of Fabric Care R&D and was in charge of product development of laundry detergent, fabric finisher, and bleach additives in Asian countries, including Japan. He worked on the development and introduction of super concentrated liquid detergent as a R&D project leader.

Since 2014, he has been in his current position and is responsible for strategic management of whole R&D.

He is also a technical committee member of the Japan Soap and Detergent Association (JSDA) and the Director of the Japan Research Association for Textile End-Uses.

Speaker Biographies
(in order of presentation)

Kasper Rorsted, CEO, Henkel AG & Co. KGaA, Germany.

Kasper Rorsted has been Chief Executive Officer of Henkel since April 2008. He joined Henkel as a member of the Management Board and Executive Vice President Human Resources, Purchasing, Information Technologies, and Infrastructure Services in April 2005 and became Vice-Chairman of the Management Board in January 2007.

In addition to his responsibilities at Henkel, Mr. Rorsted also serves as a member of the Supervisory Board of Bertelsmann AG, Germany, and on the Board of Danfoss A/S, Denmark.

Mr. Rorsted was born in Aarhus, Denmark on February 24, 1962. He studied economics at the International School of Business in Copenhagen and at Harvard Business School.

He started his career in sales and marketing at the US high tech companies Oracle and Digital Equipment. Since1995, Mr. Rorsted has held different management positions at Compaq, and in 2001 he became General Manager for the business in the EMEA region. In 2002, Compaq merged with Hewlett Packard and he became Managing Director Europe of Hewlett Packard.

P. Scott Bening, President & CEO/Division General Manager, MonoSol LLC, WS Film Division of Kuraray, USA.

Mr. Bening started his career as a chemist and technical marketing representative with Textron and Bayer AG (Mobay) in the water-based coatings and resin industry before joining Chris Craft Industries in 1989 as the Director of Sales & Marketing. He
spearheaded the emergence of Chris Craft’s water-soluble products through chemistry advances, global marketing systems, and joint development partnerships. Mr. Bening was named Vice President and General Manager of MonoSol in December of 1996, and in 2001, Scott orchestrated and managed the buyout of MonoSol from Chris Craft Industries.

Since then, he has directed the company’s business activities as President, CEO, and Board Chairman. Mr. Bening also started MonoSol Rx, the inventor of Pharmfilm® pharmaceutical oral drug delivery systems, and in 2006, directed the spinoff of Rx into a successful, separately held entity. Mr. Bening has set up and executed investment transactions private equity firms and banking affiliates to enable Monosol’s consistent double-digit growth. Throughout this period, Mr. Bening was responsible for developing MonoDose® and MonoSol’s overall strategic growth plans and business direction. He holds a bachelor’s of science degree in chemistry from St. Lawrence University (1981) and a bachelor’s degree in business administration from the University of Illinois at Chicago (1994), and is a named inventor on several patents involving MonoSol technology. Mr. Bening is a member of Chicago’s Entrepreneurship Hall of Fame (2005), a Fellow in the Indiana Society of Innovators in 2010, and is currently on the staff at the University of Illinois at Chicago’s Center for Enterprise Development Business Management School.

Mr. Bening has been married for 25 years, has two sons, and enjoys giving of his personal time mentoring several young individuals in career development. In his personal time, as a sport and music enthusiast, Scott participates in scuba diving, golf, personal training, and playing drums while being an avid ice hockey fan.

Hélène Lebedeff, Deputy Director/Sustainable Development, Veolia Environnement, France.

Hélène Lebedeff is Veolia Environnement’s Deputy Director/Sustainable Development. The world leader in the environmental services sector, Veolia Environnement offers customized solutions in three complementary business areas: water management, waste management and energy management.

Prior to the deputy directorship, Ms. Lebedeff was in charge of the environmental performance and management system of the company, where she led the construction of the environmental roadmap of the company. Before joining Veolia, she held various positions in the French administration and at the “Invest in France Agency,” where she helped international companies build their business plans in France. Ms. Lebedeff graduated from the École Polytechnique and the École Nationale Supérieure des Télécommunications and has a master’s degree in applied probabilities.

James C. Collins Jr., Senior Vice President, Polymers and Industrial Biosciences Businesses, DuPont, USA.

James C. Collins Jr. is senior vice president at DuPont. He is responsible for Industrial Biosciences, Performance Polymers, and Packaging & Industrial Polymers businesses and for leading the company’s newly created initiatives. He joined DuPont in 1984.

He began his career in DuPont Manufacturing and held positions in engineering, supervision and business management at a variety of plant sites. In 1993, he moved to Wilmington, Delaware, working in the Ag Sales & Marketing Group. He then served in a variety of roles across the globe, supporting the growth of DuPont’s agricultural businesses including the integration of Protein Technologies International (PTI) and Pioneer Hi-Bred International. While living in Hong Kong he led DuPont’s production agriculture businesses to rapidly expand its presence in Asia. From 2004 to 2010, Mr. Collins was responsible for DuPont Crop Protection, first as vice president and general manager, and then as president.

He was appointed vice president for Acquisition & Integration in January 2011, and led the integration of Danisco into DuPont. In May 2011, he was named president for the newly formed DuPont Industrial Biosciences which evolved from the Danisco transaction. He was named to his current position in September 2013.

Mr. Collins studied at Christian Brothers College in Memphis, Tennessee, and received his B.S. in chemical engineering. He also received his MBA from the University of Delaware in marketing with a focus on international business. He has received an honorary American FFA degree for his efforts to promote agriculture education with youth in the United States. In 2012, Biofuels Digest named him one of the Most Influential People in Bioenergy.

Gianni Ciserani, Group President, Global Fabric and Home Care, The Procter & Gamble Company, Switzerland.

Gianni Ciserani, leads P&G’s $26 billion fabric and home care business that includes a portfolio of iconic brands such as Tide, Ariel, Downy, Gain, Cascade, Dawn, Febreze, Mr. Clean, Swiffer, and Duracell.

Mr. Ciserani brings 26 years of experience to his role. He spent nearly 10 years in baby care. He was a core member of the global leadership team that transformed P&G’s baby care business, dramatically strengthening Pampers’ brand equity and turning the business into one of the company’s strongest and most reliable profit generators. Under his leadership, P&G built a decisive position as the clear market-share leader in Western Europe.

Following his baby care role, Mr. Ciserani led P&G’s business in the UK, three consecutive years of growth. He took the helm of P&G’s Western Europe business in 2007, out-performing competitors on top-line growth and setting a new record for consecutive months of share growth in the region, winning value share faster than core competitors and ahead of retailer brands – strong results in the midst of the global financial crisis and a deep recession in the region.

Mr. Ciserani was named Group President of Global Fabric Care in 2012, where he oversaw the successful global expansion of Tide PODS, which continues today under his leadership of Global Fabric & Home Care. Tide PODS generated $500 million in U.S. sales in fiscal year 2013, with more than a 6% value share of U.S. detergents and nearly 75% share of the unit dose form. Ariel “5-in-1” PODS has expanded into France, Belgium, the Netherlands, Poland, and the Baltic countries and into Latin America. Additional markets and brands will follow.

Mr. Ciserani represents P&G externally as a board member of the Association des Industries de Marque/European Brands Association and of ECR (Efficient Consumer Response) Europe.

He is also a member of the Swiss-American Chamber of Commerce in Zurich.

Mr. Ciserani started at P&G in 1987, working successively on the Ariel hand-wash and Dash laundry businesses in Rome. He later moved onto P&G’s Paper business in Italy where he helped establish the company’s joint venture with Fater and spent a decade on the JV Board of Directors. He remains the relationship manager with Fater still today.

Gianni graduated from Bocconi University in Milan, Italy, with a business administration degree. He, his wife, and two children currently live in Geneva, Switzerland.

Day 1 | Speaker Biographies

Biographies (in order of presentation)
He is a leading scientist in global water resources, and strategies to build resilience in water-scarce regions of the world. Professor Rockström has more than 15 years experience in applied water research in tropical regions, and more than 100 research publications in fields ranging from applied land and water management to global sustainability.

He serves on several scientific committees and boards, including as the vice-chair of the science advisory board of the Potsdam Institute for Climate Impact Research (PIK). He also co-chaired the visioning process on global environmental change for ICSU, the International Council for Science.

**Alberto Luis Dominguez, Senior Vice President, Divisional Merchandise Manager, Household Paper Goods and Chemicals, Walmart, USA.**

Dominguez is responsible for merchandising Walmart stores in the US with household paper goods and chemical products.

An accomplished executive and attorney, Alberto began his career as an Assistant State Attorney in Tallahassee, FL, prosecuting criminal cases. He then went on to hold several positions within Governor Jeb Bush’s administration, including Director of Policy and Budget for the Office of the Governor, Director of Government and Media Affairs for the Florida Department of Corrections, and General Counsel of the Florida Department of Management Services. Alberto has the distinction of being one of the youngest attorneys ever appointed General Counsel of a state agency in Florida.

Alberto joined Walmart in September 2006 as the Director, Third Party Administration and was later promoted to Vice President, Healthcare Contracting for the Health and Wellness organization. In this capacity, he was responsible for the contractual relationships between Walmart pharmacies and insurance providers, benefit managers, the Center for Medicare and Medicaid Services, and state Medicaid programs. He contributed extensively to Walmart’s healthcare strategies designed to lower health care costs for governments, employers and customers, including the $4 Prescription Program.

Previously, Alberto served as Senior Director, Global Business Development for Brinker International, the world’s largest casual dining restaurant company. He was chiefly responsible for new market entries and expansion of Brinker’s brand portfolio across international markets. His successes at Brinker included doubling its growth in Mexico, the acquisition of franchise restaurants in the UK and new market entries into Turkey, Portugal, and Honduras.

Alberto received his B.S. in Criminal Justice and his J.D. from Florida State University. He and his wife, Sally Elizabeth are raising three amazing kids: Brian, Reese, and Harper.

**Peder Holk Nielsen, President and CEO, Novozymes A/S, Denmark.**

In April 2013, Peder Holk Nielsen, took over as the second CEO of Novozymes since the IPO. He has dedicated his career to the field of industrial biotechnology, beginning in 1984 as a product manager in the Enzymes Division of Novo A/S.

Through the years, Dr. Nielsen has worked in many different parts of the business, not only shaping the company as it is today but also solidifying the market insight and research capabilities that will foster Novozymes of tomorrow.

His career path quickly took him into a succession of leadership roles. From 1987 he became head of the New Business Development Group. He took over as Vice President in R&D in 1990.
In 1995, he joined the management team of the enzyme business in Novo Nordisk A/S initially as Vice President of Development and Quality Management, and from 1999 he led Sales and Marketing in the enzymes business. He held this position until the demerger of Novozymes from Novo Nordisk.

With the creation of Novozymes in 2000, Dr. Nielsen continued running the operational side of the business as Executive Vice President, responsible for sales, marketing, and supply chain activities. In 2007 he assumed leadership for all of enzyme business, including production, procurement, development, and quality management.

During his many years in the management teams of the Novozymes business, he has focused his attention on developing organizations and processes that effectively can turn customer insights into product ideas and deliver solutions that excite Novozymes’ customers. Often he has been directly involved in leading such ventures as was the case when Novozymes built its partnerships in biomass conversion.

Peder Holk Nielsen holds a Ph.D. and a M.Sc. in chemical engineering from the Technical University of Denmark and a B.Com. in international business management from Copenhagen Business School.

Dr. Nielsen serves on the Board of Directors of Hempel A/S, a leading developer and supplier of coatings, and of LEO Pharma A/S, a leading company in dermatological and thrombotic treatments.

**DAY TWO**

**Kurt Bock, Chairman of the Board of Executive Directors, BASF SE, Germany.**

Kurt Bock was born in Rahden, Eastern Westphalia, Germany, in 1958. From 1977, he studied business administration at the Universities of Münster and Cologne as well as at Pennsylvania State University, United States, and received his diploma in 1982 from the University of Cologne. In 1985, he earned his doctorate in economics from the University of Bonn. Kurt Bock is married and has three children.

Since 2011, Mr. Bock has served as Chairman of the Board of Executive Directors, BASF SE, and is currently responsible for Legal, Taxes & Insurance, Strategic Planning & Controlling, Communications & Government Relations, Global Executive Human Resources, Investor Relations, and Compliance.

**Nicola Mendelsohn, Vice President, Facebook EMEA, United Kingdom.**

Nicola Mendelsohn joined Facebook in June 2013 as the Vice President of Facebook EMEA. Previously she was Executive Chairman and a Partner at the advertising agency Karmarama, which she joined in April 2008. She has just stepped down as president of the IPA (the advertising industry trade body), the first woman president in its 96 year history. Late in 2012, she was appointed Industry Chair of the Creative Industries Council a joint forum between the creative industries (including TV, computer games, fashion, music, arts, publishing, film and advertising) and Government. Prior to Karmarama, Nicola was the Deputy Chairman of Grey London and a Board Director at BBH.

In 2005, she was featured in Management Today’s list of the ‘Top 35 Women Under 35’. In May 2011, Nicola was named an ‘International Woman to Watch’ by Advertising Age. In the same year, she was awarded as a CEW (Cosmetic Executive Women) Achiever of the Year.

In addition, Nicola is a Director of the Women’s Prize for Fiction and a Trustee of The White Ribbon Alliance.

Her greatest joy in life comes from her husband Jon and her four children, Gabi, Danny, Sam and Zac.

**Ian Bell, Head of Home Care Research, Euromonitor International, Inc., United Kingdom.**

Ian Bell manages the research programme for the global home care, tissue & hygiene industry at Euromonitor International, which he joined in February 2001.

Euromonitor International is the leading provider of global strategic intelligence on consumer markets, with offices in London, Chicago, Singapore, Shanghai, Vilnius, Dubai, Cape Town, and Sydney.

With a network of 600 in-country analysts worldwide, Euromonitor has published internationally, for more than 30 years, respected market research reports, business reference books, and online information systems, providing strategic business intelligence for the world’s leading FMCG multinationals.

Before joining the global research team at Euromonitor International, Mr. Bell worked initially as a Japanese FMCG Research Analyst and then as Research Manager overseeing FMCG market research for Northern Europe, including the UK, Germany, and Russia. Ian has a degree in Japanese studies (BSc) from the University of Sheffield, and has also studied at Nagoya University.

**Nabil Y. Sakkab, Managing Director, Sakkab LLC, USA.**

Nabil Y. Sakkab joined Procter & Gamble in Cincinnati in 1974, after earning a 1970 BSc degree in chemistry from the American University of Beirut, a doctorate in chemistry from the Illinois Institute of Technology in 1973, and post-doctorate studies at Texas A&M. Dr. Sakkab retired from P&G in 2007 as Senior Vice President, Corporate Research and Development, following several assignments in Mexico, Cincinnati, Brussels, and Kobe, Japan over a variety of businesses, including OTC Health Care and Household Products. He served on P&G’s Leadership Council and the Innovation Committee of P&G’s Board of Directors. He is a thought leader and worldwide speaker in the Open Innovation movement, the author of several scientific and innovation management publications, and is a co-inventor on 27-plus patents. Dr. Sakkab was awarded the 2007 IRI Medal for Leadership in R&D Management and the 2007 Holland award for best article in Innovation Management.

**Itsuo Hama, President and CEO, Lion Corporation, Japan.**

Itsu Hama is the President and Chief Executive Officer of Lion Corporation. He joined Lion Fat & Oil Co. Ltd. (now Lion Corporation) after graduating from the Faculty of Science and Engineering at Waseda University in 1977 and receiving his Ph.D. there as well years later.

Dr. Hama was responsible for research management as director of the Process Development Research Center in 2002. After accepting the position as director of the Fabric Care Research Laboratory in 2004, it eventually led him into the Fabric Care Business Department in 2006 as director. From there he moved into a new field as the Director of the Board and Executive General Manager of the Household Products Division in 2008, then accepted his next position as Executive Director in 2010. From 2012 to 2013, Dr. Hama held the title of President & COO. As of January, 2014, Dr. Hama is currently President & CEO “life. love. LION” is our new corporate slogan which commits to contributing to people’s everyday life and is based on our more than 120 years of experience as observers of daily existence.
In addition to his position at Lion Corporation, Dr. Hama currently serves as the chairman of the Japan Soap and Detergent Association.

Thérèse Dooley, Senior Advisor, UNICEF, USA.

Thérèse Dooley is Senior Advisor, Hygiene and Sanitation, with UNICEF in New York. She has over 25 years of international work experience in the area of water, sanitation, and hygiene and has worked for UNICEF in Ethiopia, Afghanistan, Mozambique, and Zimbabwe. She has a background in environmental health and is a graduate of Trinity College Dublin and the University of Dundee. She specializes in the area of sanitation and hygiene promotion and is an advocate for the importance of sanitation and hygiene to child survival, growth, and development.

She received a Bachelor of Science in Environmental Health from the University of Dublin, Trinity College, and a Master of Science in Environmental Health from the school of Epidemiology and Public Health, University of Dundee. Her main areas of focus are community-based sanitation and hygiene promotion.

Jürgen Kielholz, Vice President R&D Hygiene Home, Reckitt Benckiser, Germany.

Jürgen Kielholz joined Reckitt Benckiser from Boots Healthcare, UK in 2006. Since early 2012, he has held the position of the Global R&D Category Group Director Hygiene Home. Dr. Kielholz leads all global R&D activities for Automatic Dish Washing, Surface Care, Toilet Cleaning, and Pest Control. His R&D labs are in Germany, USA, and India. In his previous roles in Reckitt Benckiser he headed the Global R&D for Fabric Care, based in Italy, and Global R&D Personal Care, based in UK.

From 1999, during five years with Unilever, Jürgen developed the first Hand & Body Care under Dove. He founded and led the Global Technology Centre for Dove Hand & Body.

Dr. Kielholz’s industry career started in Beiersdorf’s R&D Face Care in Hamburg, where he coordinated product development for the first launches of the top selling co-enzyme Q10 face care products.

Jürgen Kielholz holds a diploma in modern biology from University Basle (CH), and since 1994, a Ph.D. in biochemistry and enzymology from University Hamburg.

Christian Daume, General Manager, European R&D Center, Haier Group, Germany.

Christian Daume joined the Haier Group in 2011 and currently holds the position of General Manager, Haier Europe Appliance Research & Technology. Mr. Daume’s focus is on the development of major domestic appliances (MDA) for the European market, and on technology, and innovation management with the European Partnership–Network. Prior to joining Haier, Daume was vice president at Aweco Group, Germany.

H. Fisk Johnson, Chairman and CEO, SC Johnson, USA.

H. Fisk Johnson is Chairman and CEO, and Chairman of the Board of S.C. Johnson & Son, Inc. Fisk joined SC Johnson in 1987 and he has served in a variety of senior level management and marketing positions, both domestically and internationally.

Fisk Johnson is the fifth generation Johnson family leader of the 128-year-old company. He serves on The Consumer Goods Forum Board of Directors.

Fisk served on the Cornell University Board of Trustees from 1993 to 2001 and now is a Trustee Emeritus.

He was honored to be the 2009 Robert S. Hatfield Fellow in Economic Education, delivering Cornell University’s annual Hatfield Lecture, and to receive an Honorary Doctor of Laws degree from Villfrid Laurier University in June of 2011. In 2013, he was honored by the Samuel Curtis Johnson Graduate School of Management at Cornell University with the Dean L. Joseph Thomas Leadership Award, the highest honor bestowed on its most accomplished alumni leaders.

Fisk served as a member of the President’s Advisory Committee for Trade Policy and Negotiation (ACTPN) from 2002-2010, and was appointed to ACTPN again in 2011. From 2002 to 2011, he served on the Board of Directors of Conservation International.

Previously, he served as Director of Energizer Holdings, Inc. and Johnson Outdoors Inc., as well as Trustee of the Chi Psi National Educational Trust. He also was a member of the World Business Council for Sustainable Development from 2004 to 2008.

Fisk holds a B.A. in Chemistry and Physics; Master of Engineering; M.S. in Physics; MBA in Marketing and Finance; and Ph.D. in Physics, all from Cornell University. He recently was named Florida Southern College’s 77th Honorary Chancellor at the college’s annual Founder’s Day and received an Honorary Doctorate.

Fisk is a devoted father who enjoys spending a great deal of time with his daughter. He enjoys flying as a pilot, scuba diving, racquet sports and skiing.

Gerard Baillely, Vice President, R&D, Global Home Care and P&G Professional United States, The Procter & Gamble Company, USA.

Gerard Baillely is P&G’s Vice President, Research & Development for Global Home Care and P&G Professional. Mr. Baillely leads the innovation program for this business unit, creating a portfolio of upstream products and initiatives that address unmet consumer needs. During his 28 year career, Mr. Baillely has also worked in R&D in Fabric Care, Oral Care, Corporate R&D (analytical, modeling & simulation) and most recently Home Care. Prior to P&G, he graduated in France in Mathematiques, Superieures & Speciales from Lyceee Descartes Tours as well as in Chemistry from the Ecole Superieure de Chimie Industrielle de Lyon.

In addition to his business unit responsibilities, Mr. Baillely also leads for P&G several upstream corporate technology platforms and the Chemistry Community of Practice that span across the company. Externally, he is a member of the board for Living Well Collaborative, a non-profit innovation organization promoting the development of products and services for the senior (50+) consumers. He also is a member of the board of the Consumer Specialty Product Association, a reputed industry agency that promotes the use and safety of consumer specialty products and works with lawmakers and regulators. Mr. Baillely lives in Montgomery, Ohio, with his wife Susan, who also works at P&G, and their two sons Jean-Louis and Jean-Pierre.

Marnus Sonnekus, Associate Principal, McKinsey and Company, Republic of South Africa.

Marnus Sonnekus is an associate principal in McKinsey’s Johannesburg office and has been with McKinsey for six years. He serves consumer goods and retail companies primarily in Africa.

Mr. Sonnekus is also a member of McKinsey’s Africa Consumer Practice and McKinsey’s Africa Consumer Insights Center, which...
recently completed a comprehensive pan-African market research effort, interviewing 15,000 consumers in 15 cities across the continent. He co-authored a McKinsey Consumer and Shopper Insights article about young African consumers “Daring dreamers: Today’s (and tomorrow’s) African youth consumers.”

Mamus Sonnekus holds a Bachelor’s and Honours in Accounting from the University of the Free State in South Africa and is a registered Chartered Accountant (SA).

■ Catherine Ehrenberger, Vice President R&D and Quality Assurance, Amway, USA.

Catherine Ehrenberger leads the company’s global Research and Development efforts and the division that ensures the quality and regulatory approval of the company’s beauty, wellness, and home care products. She oversees the work of more than 900 scientists, engineers and technicians in 65 R&D and quality assurance labs worldwide. Her charge is to bring relevant, high-impact products to a rapidly changing global marketplace.

Prior to joining Amway, Ms. Ehrenberger worked at Ciba Specialty Chemicals as the Global Head of the home and personal care business lines, and as Vice President of Ciba’s Specialty Chemicals US Corp. She was a member of Ciba’s core leadership team, representing the top 50 global leaders in the company, as well as a member of Ciba’s North American leadership team and a board member of Ciba’s education foundation.

Before Ciba, Ms. Ehrenberger was director of the cosmetic and pharmaceutical chemicals division at BASF Corporation. She came to BASF from Stepan Company, where she was a chemist in the company’s product development division.

Ms. Ehrenberger received her Bachelor of Science degree in chemistry from Elmhurst College in Illinois. She received education certificates from Northwestern University’s Kellogg School of Management, New York University’s Stern School of Business, and Columbia University’s Executive Marketing Program. She is also chair of the board of directors for the American Cleaning Institute.

■ Leandro Soncini Rodrigues, Head of Marketing–Home & Personal Care, Oxiteno, Brazil.

Mr. Rodrigues is the Global Marketing Manager for Home & Personal Care at Oxiteno, the largest producer of surfactants in Latin America. He has 20 years of experience in the chemical industry working for companies, such as Oxiteno, BASF, and PETROBRAS.

Mr. Rodrigues has been working at Oxiteno since 1994, having joined the company as a trainee. He developed his career in R&D, where he worked for seven years as a researcher and process development engineer for food emulsifiers. In 2000, he joined BASF to work as technical sales manager for the Health and Nutrition division in Brazil.

In 2002, he rejoined Oxiteno in the new business development area and became responsible for strategic project management, where he managed to get the approval of Oxiteno’s Oleochemical unit, first of its kind in Latin America. In 2006, he was made project leader for the Oleochemical unit and started up this new business for Oxiteno in 2008.

Since then, he has worked in the strategic marketing area, designing, and leading long-term strategies for surfactant and oleochemical markets, which support Oxiteno’s growth throughout the Americas.

A chemical engineering graduate from E.E.Mauá (Brazil) in 1989, Mr. Rodrigues obtained a master’s degree in business administration at Escola Superior de Propaganda e Marketing (ESP&M-Brasil) in 2002, and in advanced strategic management IMD (Switzerland) in 2011. He also holds a Black Belt (Six Sigma) certificate.

He is married and has two young children. Mr. Rodrigues enjoys traveling with his family and diving in exotic places.

■ Tom LaForge, Global Director of Human and Cultural Insights, The Coca-Cola Company, USA.

Mr. LaForge studies the large, long-term macroforces that are reshaping our world and driving the changes in human behavior we all call trends. His work is used to guide development of portfolio and M&A strategies, brand and communication strategies, and numerous corporate social responsibility programs such as 5by20, a global effort to empower five million female entrepreneurs by 2020.

He has explored such topics as the meaning of well-being happiness, human motivation, and the rising value of human creativity in over 30 countries. He is fascinated by the unprecedented set of socio-historic Macroforces that are driving the rapidly changing relationships businesses have with governments, the environment, and civil society. He holds degrees in marketing and economics from San Jose State and sits on the Board of Advisors for the Masters of Market Research Program at both the University of Georgia and Michigan State University. He is a founding member of the Expedition, a think tank focusing on the emerging Relationship Economy; serves on the Serenbe Fellows Committee; was featured in the book 2012 Grateful Leadership; and is an advisor to Bonus Creative Week MX, Sustainable Brands, and Mix & Stir Studio – a San Francisco-based incubator for human-centered technology companies.

■ Tom Domen, Long Term Innovation Manager, Ecover, Belgium.

Tom Domen graduated in 1996 with a Master in Industrial Design. In 2007, he completed a Master in Sustainable Development at the University of Brussels. With his Master on Sustainable Technology for Eastern Africa, he received the yearly Award for Innovative Technology from the Chamber of Engineers.

He started working for Philips in packaging innovation after which he worked for five years as a marketing and communication specialist at Panasonic. Mr. Domen has been working for Ecover for seven years, where he is responsible for the long-term innovation strategy and sustainability for Ecover and Method products (laundry, cleaning, dishwashing, home care, and personal care).

Tom is also a member of the board of Kringwinkel, a Belgian organisation that gives a second life to what otherwise would be waste. For over 25 years, Ecover has been producing products that adhere strictly to the World Health Organisation’s definition of health, which incorporates the well-being of the whole person and the environment in which he or she lives. They are constantly innovating and pushing boundaries to create new and more effective products that have minimum negative impact on the environment, and consistently achieve extraordinary ethical standards with their products, management and production methods.
Kao Sustainability Statement
Three Key Areas

Kao’s mission is to strive for the wholehearted satisfaction and enrichment of the lives of people globally and to contribute to the sustainability of the society. By developing innovative products and services, we work to conserve the environment and foster well-being in the communities we serve now and in the future.

To do this, in partnership with our stakeholders, we promote a culture of integrity in everything we do and we provide a workplace that maximizes the potential of each and every one of our employees.

To advance our business responsibly and sustainably, we are focusing our efforts on the three key areas of Conservation, Community and Culture.

Enriching lives, in harmony with nature.
GlucoPure is the new generation of sugar-based surfactants. An optimized ecological profile is now combined with top-level performance to meet market benchmarks.

To find inspiration, THERE’S NO PLACE LIKE HOME.

‘WE CARE ABOUT HOME’ IS THE PRINCIPLE THAT GUIDES US: CLARIANT HOME CARE.

From hand mildness, rich foam, surface protection and cold wash to ecological conscience and maximum cleaning performance, we constantly research new products to help you meet consumer desire for laundry, dishwashing and surface care. An international R&D and marketing network supports you in making new product claims, entering new markets and increasing the overall benefit-cost ratio of your formulations.

WWW.HOME CARE.CLARIANT.COM