Montreux 2010
New Strategies in a Dynamic Global Economy

7th World Conference on Detergents
4–7 October 2010
Montreux Music & Convention Centre
Montreux, Switzerland

Sponsored by:
American Oil Chemists’ Society (AOCS)
American Cleaning Institute (ACI)
The International Association of the Soap, Detergent, and Maintenance Products Industry (AISE)
Le Comité Européen des Agents de Surface et leurs Intermédiaires Organiques (CESIO)
Japan Oil Chemists’ Society (JOCS)
Japan Soap and Detergent Association (JSDA)
SURFACTANTS

- Anionics
  - Sulphonation / Sulphation
  - Vacuum Neutralization
  - Drying
- Non Ions
  - Ethoxylation / Propoxylation
  - Alkanolamides
- Amphoteric & 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
- Methylesters for MES production

INORGANIC CHEMICALS

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- Sulphuric Acid
- Sodium & Potassium Sulphate
- Zeolite
- Sodium Tripolyphosphate
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- Phosphoric Acid
- NPK
- PAC (Poly Aluminium Chloride)

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Booths 301, 303 and 305

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Tel +65 6316 9919 Fax +65 6316 9920 H/p +65 9137 9397

tda 08/10
Dear Conference Attendees,

On behalf of AOCS, ACI, AISE, CESIO, JOCS, and JSDA, I welcome you to Montreux 2010, the 7th World Conference on Detergents.

I’ve been involved with the Montreux Conference in one way or another since 1992 and there’s no doubt in my mind that the stature of this conference has grown continuously in that period. The Montreux 2010 program represents another giant leap in focused relevance to our business. The topics and speakers have been carefully chosen to cover strategic areas that leaders in both the business and technical sectors can use to gauge current and future trends and that may shape your decisions for the future. For the first time ever, we have the CEOs from Henkel, P&G, and Unilever speaking, as well as a star-studded cast of speakers covering nearly every aspect of our business around the globe. 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 a productive and enjoyable conference.

Regards,

J.K. Grime
General Chair

Program Index

AOCS Antitrust Policy .................... 30
Biographies ............................ 32
Conference Presentations
   Day 1 • Tuesday ....................... 11
   Day 2 • Wednesday .................... 15
   Day 3 • Thursday ..................... 19
Poster Presentations .................... 22
Co-Sponsoring Organizations ........ 4
Executive/Program Committee ......... 6
Exhibition Information .................. 39
General Information .................... 8
Hotel Information ....................... 8
Montreux Map and Information ....... 8
Optional Tours .......................... 9
Participating Organizations .......... 4
Registration Hours ...................... 8
Schedule at a Glance ................... 10
Social/Optional Events ................. 7

Index to Advertisers

AkzoNobel Surface Chemistry AB ....... 1
AOCS ................................. 25, 27, 29
Chemithon Corporation ................. 2
Clariant International Ltd. ............ Cover 4
Cognis GmbH .......................... 16–17
CLER/ECOSOL ......................... 9
Desmet Ballestra ....................... Cover 2
Dow Chemical Company .............. Cover 3
EMPA Testmaterials AG ............... 23
ISP—International Specialty Products ... 41
Kolb Distribution Ltd. ............... 31
MonoSol LLC .......................... 7
Novozymes A/S ........................ 13
Thermphos ............................ 21
Wacker Chemie AG .................... 33
Co-Sponsoring Organizations

AOCS
P.O. Box 17190, Urbana, Illinois 61803-7190, 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 101 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 over 4,500 members throughout 90 countries.

American Cleaning Institute℠ (ACI)
(formerly The Soap and Detergent Association)
1331 L Street, NW, Suite 650, Washington, DC 20005, USA
http://www.cleaninginstitute.org

American Cleaning Institute℠ (ACI—formerly The Soap and Detergent Association) is the Home of the U.S. Cleaning Products Industry® and represents the $30 billion U.S. cleaning products market. ACI members include the formulators of soaps, detergents, and general cleaning products used in household, commercial, industrial and institutional settings; companies that supply ingredients and finished packaging for these products; and oleochemical producers. ACI and its members are dedicated to improving health and the quality of life through sustainable cleaning products and practices.

International Association for Soaps, Detergents and Maintenance Products (AISE)
Third Floor, Avenue Hermann Debroux 15A, 1160 Brussels, Belgium
www.aise.eu

AISE is the voice of the detergents and cleaning products industry in Europe, representing 37 national associations in 42 countries, and more than 900 companies. As well as conducting advocacy activities with stakeholders and providing guidance to industry members on implementation of regulatory issues, AISE develops and promotes voluntary initiatives aimed at driving sustainable mainstream changes in sustainable production and consumption patterns. At the conference, AISE will exhibit information on REACH, CLP, Risk Communication, as well as details on its voluntary industry projects, particularly recent developments on ‘the Charter for Sustainable Cleaning’ and Cleanright.eu web portal for consumers.

Comité Europeén des Agents de Surface et leurs Intermédiaires Organiques (CESIO)
c/o Cefic, Avenue E. van Nieuwenhuys e 4, B-1160 Brussels, Belgium
www.cefic.org/cesio

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 8th World Surfactant Congress and Business Convention from 6 to 8 June 2011 in Vienna. 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/).

Japan Oil Chemists’ Society (JOCS)
Nihonbashi 3–13–11, Chuo-ku, Tokyo 103-0027, Japan
http://wwwsoc.nii.ac.jp/jocs

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. The objective of the Society is to contribute to the advancement of science and technology on oils and fats, surfactants, oleochemicals, biochemicals and related substances through working to bring members of the Society closer together. In 2002, the Society celebrated the 50th anniversary of its establishment.

Japan Soap and Detergent Association (JSDA)
13–11, Nihonbashi 3-chome, Chuo-ku, Tokyo 103-0027, Japan
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.

Participating Organizations

China Association of Surfactant Soap and Detergent Industries (CASSDI)
Suite 1015, Zhong kun Plaza, 59 Gaoliangqiao Xiejie, Haidian District, Beijing 100044, P.R.China
www.cassdi.org

Founded in September of 1983, CASSDI (China Association of Surfactant Soap & Detergent Industries) is a national NGO of enterprises, public services, research institutions, information centers and educational units for soap, detergent, surfactant and oleochemical industries as well as some relative realms. During the past 27 years, CASSDI has been committed to promoting relative standards and regulations, science and technology, statistics information, industrial investigation, and providing venues of market and technical communication and educational opportunities in Personal Cleaning, Household Cleaning and I&I Cleaning fields. Today, CASSDI has over 300 members, among which production enterprises account for 76%.

Continued on page 6
The Executive Committee would like to thank the following companies for their generous contributions to the 7th World Conference on Detergents. Their partnerships with Montreux 2010 are greatly appreciated.

- **Clariant**
  - Official "Welcome to Montreux" Sponsor
  - Fabric & Surface Care Gala Banquet

- **Kao**
  - Program Support

- **MonoSol, LLC**
  - Tuesday Refreshment Breaks

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- **novozymes®**
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  - Conference Portfolio Bags

- **AOCS FOUNDATION**
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**Italian Chemical Society**
Sede di Roma, Viale Liegi 48c, I-00198 Rome, Italy
www.soc.chim.it

The Italian Chemical Society’s primary goal is to promote a training culture and chemicals that firstly contribute to the solution of the problems that afflict humanity and the growth of quality of life and secondly establish a virtuous relationship with society that demonstrates the science of chemistry to be a valuable ally.

**Oil Technologists’ Association of India**
C/O Harcourt Butler Technological Institute, Kanpur – 208 002 India
http://otai.org

The Oil Technologists’ Association of India (OTAI) was established in the year 1943. It currently contains nearly 2000 members 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, oleochemicals, and allied industries and disseminates knowledge by way of organizing short term courses as well as national and international seminars. It also publishes the peer reviewed quarterly journal “Journal of Lipid Science and Technology (Formerly JOTAI).”

**The Swiss Cosmetic and Detergent Association (SKW)**
Breitingerstrasse 35 Postfach, CH-8027 Zürich, Switzerland
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.

**UK Cleaning Products Industry Association (UKCPI)**
Century House, Old Mill Place, Tattenhall, Cheshire, CH3 9RJ, UK
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.

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**Co-Sponsor and Participating Organization Exhibit**
You are invited to visit these areas, located in the exhibition hall, for information from the organizations such as upcoming conference literature, books and magazines, and membership information.
Conference Social Events

Welcome Reception
Sponsored by Clariant Corporation
Monday, 4 October 2010
19.00–20.30
Casino Barrière de Montreux—Salon Deauville
Rue du Théâtre 9, CH-1820 Montreux

Come and enjoy this opportunity to network with your colleagues and enjoy a variety of hors d’oeuvres and beverages while a live band entertains.

This event is included in the registration fee for a full registration.
Additional tickets may be purchased at the Registration Desk at the Montreux Music & Convention Centre for €95.

If you wish to visit the Casino after the reception, passports are required for admittance.

Exhibition Receptions
Sponsored by Freeslate, Inc.
Tuesday, 5 October 2010
17.15–18.15
Wednesday, 6 October 2010
17.00–18.00
Montreux Music & Convention Centre—Exhibition Hall

Directly following the end of the sessions, this is the perfect time to visit with exhibitors and colleagues.

These events are included in the registration fee for full registration.
Additional tickets may be purchased at the registration desk for €50 per evening.

Reception and Banquet
Sponsored by Dow Fabric and Surface Care
Wednesday
6 October 2010
19.00–22.00
Fairmont Le Montreux Palace

Reception: 19.00–19.30 Grand Hall Lobby
Banquet: 19.30–22.00 Le Petit Palais, Leman AB Ballroom

Spend an evening in the good company of your colleagues while enjoying a gourmet meal, fine wine, and live jazz. A cash bar also will be available.

This event is included in the registration fee for full registration. Registered delegates will receive a banquet voucher in their registration packet.

Please note:
♦ It is necessary to visit the registration desk after 12.00 on Tuesday, 5 October to exchange this voucher for your banquet ticket and to select your table assignment.
♦ A room diagram and table sign-up sheet are available for selecting your table. Complete tables may be reserved if 10 vouchers are exchanged at the same time.
♦ Please remember to bring your banquet ticket with you to the event as tickets are required at the door of the Leman AB Ballroom for admittance.
♦ Additional tickets for the event are available at the Registration Desk and at the door for €135, based on space availability.
Montreux Information

Montreux-Vevey Tourisme
This tourism bureau will provide you with information about Montreux and the local attractions, restaurants, and tours available (marked with the large i on the map). Pavillon d'information Montreux, Pl. du Débarcadère 1, CH-1820 Montreux
Phone: +41 848 86 84 84
Fax: +41 21 962 84 94

General Information

Registration Hours
Monday, 4 October ..........14.00–20.00
Tuesday, 5 October ..........7.30–18.15
Wednesday, 6 October ......8.00–18.00
Thursday, 7 October .........8.00–16.00

Exhibition Hours
Tuesday, 5 October .........10.00–18.15
Wednesday, 6 October ....10.00–18.00

Attire
Meetings/Exhibition: Business Attire
Welcome Reception: Business Attire
Conference Reception/Banquet: Business Attire
Guest Tour: Casual Dress and Comfortable Shoes

Hotels
Fairmont Le Montreux Palace—Conference Headquarters Hotel
Grand-Rue 100, CH-1820 Montreux, Phone: +41 21 962 12 12; Fax: +41 21 962 17
Best Western Eurotel Riviera
Grand-Rue 81, CH-1820 Montreux, Phone: +41 21 966 22 22; Fax: +41 21 966 22 20
Eden Palace au Lac
Rue du Théâtre 11, CH-1820 Montreux, Phone: +41 21 966 08 00; Fax: +41 21 966 09 00
Golf—Hotel René Capt
Rue Bon-Port 33-35, CH-1820 Montreux, Phone: +41 21 966 25 25; Fax: +41 21 963 03 52
Grand Hôtel Suisse Majestic
Av. des Alpes 45, CH-1820 Montreux, Phone: +41 21 966 33 33; Fax: +41 (0)21 966 33 00
Hotel Bon Port
Rue du Théâtre 4, CH-1820 Montreux, Phone: +41 21 964 20 70; Fax: +41 21 962 80 79
Hotel Splendid
Grand Rue 52, CH-1820 Montreux, Phone: +41 21 966 79 79; Fax: +41 21 966 79 77
Royal Plaza
Grand-Rue 97, CH-1820 Montreux, Phone: +41 21 962 50 50; Fax: +41 21 962 51 51
Tralala Hotel
Rue du Temple 2, CH-1820 Montreux, Phone: +41 21 963 49 73; Fax: +41 21 963 23 11
Villa Toscane
Rue du Lac 2-8, CH-1820 Montreux, Phone: +41 21 966 88 88; Fax: +41 21 966 88 00

Montreux Music & Convention Centre/Auditorium Stravinski
Grand-Rue 95, CH-1820 Montreux
Phone: +41 21 962 20 20; Fax: +41 21 962 20 20
Optional Tours

Please visit the Registration Desk at The Montreux Music & Convention Centre to purchase tickets based on availability.

Three-Country Tour—Switzerland, Italy, and France
Tuesday, 5 October 2010
8.30–17.30
Passports and appropriate visas to visit Italy and France are required for this tour. Please check with your country of origin for your specific requirements.

Switzerland, Italy, and France in one day! On the tour, guests will visit Martigny, the first town north of the Alps; Aosta, Italy, famous for its Roman ruins; and then to Mont-Blanc, the highest peak in Europe and the home of the French ski resort of Chamonix where the first winter Olympics took place in 1924.
On-site tickets are €150, based on availability.

Lavaux Wine Tour
Wednesday, 6 October 2010
9.30–15.00
Tour through the famous Lavaux wine region with a stop for a wine tasting. Then travel to Lausanne for a sightseeing tour and lunch in a lakeshore restaurant.
On-site tickets are €125, based on availability.

Gruyères Tour
Thursday, 7 October 2010
10.00–16.00
Travel the scenic route to Gruyères, the famous medieval cheese village. The tour includes a visit to the cheese factory and lunch.
On-site tickets are €120, based on availability.

For further information, please contact the tour operators:

Switzerland:
Av. E Van Nieuwenhuyse 4, bte 2, B-1160 Brussels, BELGIUM
ph: 32-2-676 72 55  fax: 32-2-676 73 47  www.lasinfo.org

Italy:
Via della Posta 2, 20122 Milano, ITALY
ph: 39-02-8974 01 94  fax: 39-02-8974 01 95  www.montreux2010.com

France:
301, quai du commerce, 75007 Paris, FRANCE
ph: 33-1-45 83 95 00  fax: 33-1-45 83 95 01  www.montreux2010.com
Schedule-at-a-Glance

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

Monday, 4 October 2010
14.00–20.00 Registration ................................................................. Exhibition Hall
19.00–20.30 Welcome Reception ..................................................... Casino Barrière de Montreux

Tuesday, 5 October 2010
7.30–18.15 Registration ................................................................. Exhibition Hall
7.30–18.15 Poster Viewing ......................................................... Auditorium Stravinski Lobby
7.30–18.15 Cyber Café ................................................................. Exhibition Hall
9.00–10.00 Oral Presentations ...................................................... Auditorium Stravinski
10.00–10.30 Break ....................................................................... Exhibition Hall
10.00–18.15 Palace Bistro ......................................................... Exhibition Hall
10.50–12.00 Oral Presentations .................................................... Exhibition Hall
12.00–14.00 Midday Break ............................................................
14.00–14.55 Oral Presentations ...................................................... Auditorium Stravinski
14.55–15.25 Break ....................................................................... Exhibition Hall
15.25–17.15 Oral Presentations ...................................................... Auditorium Stravinski
17.15–18.15 Exhibition Reception .................................................. Exhibition Hall

Wednesday, 6 October 2010
8.00–18.00 Registration ................................................................. Exhibition Hall
8.00–18.00 Poster Viewing ......................................................... Auditorium Stravinski Lobby
8.00–18.00 Cyber Café ................................................................. Exhibition Hall
9.00–10.00 Oral Presentations ...................................................... Auditorium Stravinski
10.00–10.30 Break ....................................................................... Exhibition Hall
10.00–18.00 Exhibition Open ....................................................... Exhibition Hall
10.00–14.00 Palace Bistro ......................................................... Exhibition Hall
10.50–12.00 Oral Presentations .................................................... Exhibition Hall
12.00–14.00 Midday Break ............................................................
14.00–15.05 Oral Presentations ...................................................... Auditorium Stravinski
15.05–15.35 Break ....................................................................... Exhibition Hall
15.35–17.00 Oral Presentations ...................................................... Auditorium Stravinski
17.00–18.00 Exhibition Reception .................................................. Exhibition Hall
19.00–19.50 Reception ................................................................. Le Montreux Palace, Grand Hall Lobby
19.30–22.00 Banquet ................................................................. Le Petit Palais, Leman AB Ballroom

Thursday, 7 October 2010
8.00–16.00 Registration ................................................................. Exhibition Hall
8.00–16.00 Poster Viewing ......................................................... Auditorium Stravinski Lobby
9.00–10.15 Oral Presentations ...................................................... Auditorium Stravinski
10.15–10.45 Break/Visit with Poster Authors ................................ Auditorium Stravinski Lobby
10.45–12.00 Oral Presentations ...................................................... Auditorium Stravinski
12.00–14.00 Midday Break ............................................................
14.00–16.00 Oral Presentations ...................................................... Auditorium Stravinski

The Montreux 2010 DVD (List Price: €135) is a collection of the speakers’ audio recordings synchronized with their visual presentations. This DVD will be mailed after the conference to those who have pre-ordered it. This DVD will be sent to the address you provided on your registration form. Please notify AOCS of any address changes to ensure delivery.

If you have not pre-ordered this DVD with your registration, order forms with the discounted price of €75 are available at the Registration Desk or AOCS Press Bookstore at the Montreux Music & Convention Centre.
At P&G, our Purpose as a Company is to touch and improve the lives of the world’s consumers. We’re genuinely inspired by this Purpose and we believe it’s the one factor above all others that has enabled P&G’s growth for more than 172 years. Touching and improving lives is also our over-arching growth strategy. We want to touch and improve more consumers’ lives in more parts of the world...more completely than we do today. We are executing against this growth strategy by extending our category portfolios vertically to higher and lower value tiers, by expanding geographically into category whitespaces and by improving existing products and extending portfolios into adjacent categories.

P&G’s detergents business is instrumental in fulfilling our Purpose and delivering our Purpose-inspired Growth Strategy. We believe that through leveraging our core strengths—innovation, consumer understanding, brand building, go-to-market and scale—we can improve more consumers’ lives around the world every day in small but always meaningful ways.

As we look to reach and improve the lives of more of the world’s consumers we see a number of challenges facing our industry:

• First, providing affordable products in developing markets and developed markets alike.
• Second, finding new ways to provide meaningful consumer-focused innovation on our brands.
• And third, developing products that are sustainable and still meet consumers’ needs for quality and performance.

We intend to show how we are leveraging our Purpose across all three areas to touch and improve people’s lives in so many basic, important ways every day.

The global laundry care category is at an important crossroads as it laps outsized growth over the last several years from brand convergence (Tide with a touch of Downy) and compaction (taking out the water and shrinking the bottle), investing heavily to drive volume growth in a largely zero sum market outside developing regions. Global competitive pricing battles are escalating, with most major manufacturers lowering pricing and increasing promotional spending to drive volume growth, which is shrinking category sales and negatively impacting margins despite a relatively benign input cost environment.

With consumers increasingly value conscious and low-priced brands expanding market share, industry needs to rethink its previous operating assumptions—growth through favorable product mix is no longer good enough and the industry needs to rethink the growth algorithm and differentiate products with innovation, mindful of the shift in consumer value equation. With another round of powder detergent compaction hitting shelves and gel variants likely to come to the US soon, innovation activity is relatively robust, but it remains to be seen if the consumer is willing to trade up in this high unemployment, weak consumption environment. We continue to believe industry is entering a period...
of slowing growth in developed markets, with developing markets benefitting from combination of (i) rapidly expanding middle class and (ii) increased penetration of washing machines, driven by higher disposable income and increased urbanization. In developed markets, further expansion of the washing regime, with additives and other tools, should help modestly expand category growth and improve the washing experience. Still, industry needs to adjust to the changing landscape, end the brand dilutive pricing battles and give consumers real innovation to make her life easier and thereby drive mix enhancing growth.

11.00 Innovation—The Future of the Textile Business.
   Chris DeSoiza, Vice President, Milliken Research, USA.

The future of the textile business will require a synergy of the textile manufacturer and the fabric care industry. The textile business has been an integral part of every country’s manufacturing base at some point. For much of the textile industry's past, innovation has been focused on increasing the throughput, quality, and the ability to make increasingly complex fabric patterns and designs. However, today these innovations have been broadly commercialized and have led to the commoditization of the majority of the industry. Textile companies that have continued to grow have transformed themselves from being a provider of fabric to a provider of fabric performance. Benefits such as comfort, ease of care, health and well-being, safety and protection, and customization are on the forefront of textile innovations. The textile industry currently has technologies that are providing basic and advanced performance features in soil release, moisture management, wrinkle release, odor control, bacterial control, skin wellness, electrical arc protection, flame retardancy, color change and many others. In addition, there are significant advancements on the horizon that will expand the performance of these and add new features. This will completely change the consumer’s selection process. The home laundry process will enable consumers to not just clean their clothing, but mass customize them based on individual desires and needs with a level of ease that could have only been imagined just a few years ago. In the near future, the in-home washing machine and dryer will allow families to customize the look and performance of their clothing.

As we consider emerging economies and the overall impact on the global environment, we see a need for innovation that will span the supply chain to create breakthroughs that will enable access to these markets while minimizing the environmental impact. In-home washing must be revolutionized to make it viable from the current economic, natural resource and environmental perspective. Innovations that facilitate drying in the washing process or drastically reduce mechanical or air drying time, while providing the same textile look and feel, will open new markets and create sustainable value. The future of the Textile Industry will be based on innovation requiring strong collaborations across the whole supply chain. Together we will create the future in home laundry care.

11.30 Discussion

12.00 Midday Break

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Afternoon

Session Chairs

Rodrigo Olmedo, Director-General, Detertec, Ecuador.

Chris DeSoiza, Vice President, Milliken Research, USA.

14.00 Introduction of Afternoon Session.
   Rodrigo Olmedo, Director-General, Detertec, Ecuador.

14.05 Introduction of Keynote Presentation.
   J. Keith Grime, President, JKG Consulting LLC, USA.

14.10 KEYNOTE
   Paul Polman, CEO, Unilever, United Kingdom.

The events of the last few years have shaken the very foundations of the global economy. The old certainties have gone forever. Many are proclaiming a ‘new normal’ – a prolonged period of slower growth, bigger government intervention and a re-emergence of protectionism.

Industries that choose to see this as a wake-up call can prosper. But it will require a different approach, a new way of doing business. The new normal has given rise to the new consumer: more demanding; more value-conscious; more distrustful of business.

For a sector that touches the lives of billions of consumers’ everyday, the detergents industry faces both opportunities and challenges. We can either be in the vanguard of change – delivering more innovative products and more sustainable solutions – or stuck in the slow lane, relying on the tried and tested methods of the past.

Thriving in this new environment will require, above all, a higher level of leadership – authentic leadership, borne of a desire to do the right thing for the consumer and for society at large. Montreux provides a perfect opportunity for the leaders of our industry to come together to set out this new vision for the new normal.

We will explore the opportunities, set up the challenges and identify new and exciting ways in which our industry can work together to create the opportunities of the future.
IT’S OKAY TO PLAY WITH YOUR FRUIT

…because the end of fruit stains is here.

For the really stubborn pectin-based stains, there is a new detergent enzyme category.
While many Western companies are struggling to maintain their economic and industrial competitive advantage, China invests heavily in its capacity to innovate and to develop proprietary technologies. It only seems a matter of time until Chinese companies become leading innovators in their own right. How should Western CEOs respond to this challenge? What do we learn from competing in China—and with the Chinese—for developing better products and technologies?

Specifically, we will talk about:

1. How to evaluate—as a Western company—when and how to innovate in China, as China over the next decade will strengthen R&D and front-end innovation.

2. How to take advantage of a distinct set of China-produced innovation capabilities that will be of use for both Chinese firms and Western multinationals.

3. How to compete more successfully in China with R&D tailored to the Chinese context.

**Emerging Sustainability Paradigms.**

Jeffrey Hollender, Executive Chairman, Seventh Generation, Inc., USA.

In the face of diminishing natural resources and continued widespread environmental degradation, public pressures on manufacturers are growing exponentially. Consumers are increasingly expecting companies to solve problems not create them and refusing to support brands perceived as irresponsible or uncooperative. New communications technologies encourage this activist consumer mindset by providing easy 24/7 access to deep streams of previously inaccessible information on corporate behavior.

To respond effectively to these trends, manufacturers must redesign “corporate responsibility” and proactively seek to be truly “good” rather than simply “less bad.” They must innovate new systems, technologies, and attitudes that redefine what’s possible and in doing so create new purpose. Moving forward, meaningful growth will come only to those brands that demonstrate both material and philosophical leadership by reimagining their missions, embracing radical transparency, and striving for authentic sustainability.

This new paradigm will punish shallow “greenwashing” and reward genuine progress on sustainability issues. But to reap competitive advantage, manufacturers will need to move beyond the relative simplicity of correcting misleading claims and disingenuous packaging to an understanding of the true impacts of their consumption. Bio-based and other raw materials must be traced to their origins and examined for their effects on communities and ecosystems.

Simultaneously, a rapidly growing emphasis on hazard assessment built upon the Precautionary Principle is displacing traditional risk-based assessments and changing how companies formulate in the United States. New endpoints are emerging—from estrogenics to asthmagens—and manufacturers must respond or risk marketplace irrelevancy.

Seventh Generation's current platform reflects these changes in the home care products landscape and reveals the future of green cleaning. From packaging advances to formula choices to the company's decision to fully disclose its product ingredients to consumers, the brand is providing a useful model for what must come next.

Innovations now in development will provide further new directions for the industry to take. Many of these are springing from more complex Life Cycle Analyses, which are teaching company product designers how to take a systemic approach to climate change, move toward completely natural formulations while maintaining efficacy, find novel ways to provide benefits, and do much more with far less. This work is about moving from products of consumption to providing products of service and evolving the industry’s business model to sell value as well as goods. In this shift lie the real opportunities for growth and prosperity.

**The Future of the Future.**

Richard Seymour, Co-Founder & Director, Seymourpowell, United Kingdom.

As has been said many times before, we see things not as they are, but as we are. The problem is, who are the we? Big Businesses are often run now by an age group so dislocated from the new generation of consumers that they are having real trouble catching up. Marketing Directors who trained in the 20th Century speak to their counterparts in Advertising (who did the same) and wonder why their audiences have turned away.

Time on-line has overtaken broadcast in many cultures.

Paul McCartney was 64 four years ago. The electric car hasn’t taken over the world.

The ultrasonic washing machine sits twiddling its thumbs in the wings.

The first person to live for 1,000 years is probably already alive.

Welcome to Renaissance 2, the dyspraxic culture of the 21st Century, where what we can do runs ahead of our imagination of what to do.

Dr. Richard Seymour spends much of his time now preparing large businesses for what he calls the ‘violence of the new’, and he’s got some good news and some bad news for you.

The good news is he’s going to tell you about what’s waiting just around the corner.

And the bad news…?

Buckle up.
Day 2: Innovations in the Value Chain

Wednesday, 6 October 2010

Complex dynamics define our raw material and formulation dynamics—from chemical technology to packaging to alternative materials.

Oral Presentations ◆ Montreux Music & Convention Centre, Auditorium Stravinski

NOTE: Each session will have discussion time at the end of the session.

Morning

Session Chair
Manfred Trautmann, Vice President and General Manager BU Detergents and Intermediates, Clariant International, Switzerland.

9.00

Introduction of Day 2 and Introduction of Keynote Presentation.
Manfred Trautmann, Vice President and General Manager BU Detergents and Intermediates, Clariant International, Switzerland.

9.15

KEYNOTE
Innovative Sustainable Consumption: A Challenge for the Entire Value Chain.
Kasper Rorsted, CEO, Henkel AG & Co. KGaA, Germany.

At Henkel, sustainability has been important for more than 100 years. Our experience has ingrained sustainability into our company DNA, and continues to set our agenda for the future.

We integrate all three dimensions of sustainability—people, planet and profit—in the way we run our business; We understand people’s expectations towards our company and leverage our role as an employer and enterprise to contribute to social progress. As a leader we shape our innovation pipeline and value chains to reflect the planet’s current and future sustainability challenges. And, finally, we generate our profit by combining performance & sustainability into a leading value proposition to customers and consumers.

We believe that only when taking a holistic view, integrating everyone involved along the entire value chain, a true difference can be made. In order to make an impact, a company’s long-term commitment is important, but there also must be internal tools and processes so that this commitment can be operationalized. It is also critical that sustainability is integrated into a company’s values.

Of course, internal processes are easier for a manufacturer to control and the parts of the value chain that are outside of that control are more of a challenge. These areas can only be successfully tackled by partnering. For example, to ensure true sustainability, raw materials and feedstocks need to fulfill high standards. And striving for sustainable innovation is a joint task for the manufacturer, appliance industry and trade while still involving the consumer to insure that the final product is highly relevant to his or her needs.

We are convinced that partnering along the entire value chain, aiming at innovative solutions that show an increased efficiency, can lead to true innovative sustainable consumption. This way of doing business for suppliers, the appliance industry and detergent manufacturers create value and set new standards. This is critical especially in the context of increased regulation.

Making innovative sustainable consumption measurable is a joint task, and by leveraging our efforts we can create a vision about what can be achieved in a reasonable time frame.

10.00 Break

10.30

Crossing the ‘Valleys of Despair’—Successfully Integrating Acquired Businesses.
Michael Heinz, General Manager/Global Integration Manager Ciba, BASF SE, Germany.

Over the course of the last 10 years, BASF has been actively managing its portfolio organically but also through divestments and acquisitions to safeguard its sustainability as “The Chemical Company”. More than 10 billion Euro in assets were sold and 16 billion Euro added to its businesses. As a result, BASF has acquired a great deal of knowledge when it comes to crossing valleys of despair which ultimately come along with divesting or integrating businesses.

While the literature on M&A transactions has expanded considerably in recent years and there is a good deal of agreement about what works and what doesn’t work I would like to present to you our experiences in post merger integrations and what it took to cross our valleys of despair– for the most part using Ciba as an example, which had many facets and a high degree of complexity. For this presentation, only a limited number of selected aspects will be highlighted, primarily related to employees and customers. Each integration project has specific aspects which have to be considered adequately in the respective integration approach. Such specifics can be related to the acquired company, to the external environment or to internal factors. It is important to fully understand those drivers especially when considering the transfer of captured learning’s to future integrations.
The Art of Being Chosen—Secrets of Success from the Giants of Retail.
Martin Butler, Retail Author and Lecturer, United Kingdom.

Today one of the largest and most successful businesses on the planet is a retailer—40 years ago it almost went bust.

Since growing up working in my parents’ shop, I’ve always wondered what it takes to be a success. In particular, a successful retailer. So I decided to find out who’s doing what, and how it’s done around the world.

Face-to-face and over the last couple of years, I’ve interviewed nearly 100 of the world’s leading retailers across every continent. Throwing considerable light on many issues, I’ve found ‘retail is simple, but it ain’t easy’—and most would agree.

Often the difficulty is perceived as delivering the right merchandise at the right price. But I’ve found the retailers who enjoy the most success tend to concentrate their efforts on the softer issues, the issues that require careful stewardship of others’ emotions.

And at the risk of stating the ‘blindingly obvious’, I’ve also found there are as many facets to retail success as there are visionary leaders. No surprise there. But what I’ve particularly noticed is the mechanics tend, to a greater or lesser extent, to cluster into six thought-processes or understandings—there may have been more but I didn’t notice them. So as a former adman at ease with hyperbole, I decided to call my observations: ‘The six secrets of success.’

In Montreux I’ll tell you what these secrets are.

But being chosen is the first and for me, the very essence of all commercial success—fortunately something Wal-Mart came to terms with 40 years ago.

11.30 Discussion
12.00 Midday Break

Afternoon
Session Chairs
Masaki Tsumadori, Research Fellow, Global R&D, Kao Corporation, Japan.

Our protection & safety

Our “Feelosophy” is about enhancing Personal and Home Care applications to create a holistic product experience in four key dimensions: We research what consumers perceive and feel, improve the effect of formulations and develop technologies to simplify product usage. Take protection and safety. Skin, hair and fabrics need to be protected from external influences such as sun, cold, pollution, chemical treatments and mechanical forces. Our Sprayable Sun Care Concept offers not only high UV protection but also easy spreadability leading to an even distribution on skin. With our APIC® sugar surfactants, we meet consumer demands for products that are safe for themselves and the environment. How about joining our well-being Feelosophy?
Hiromitsu Takaoka, Director of Fabric-Care Research Laboratories, Lion Corporation, Japan.

14.00 Introduction of Afternoon Session.
Masaki Tsumadori, Research Fellow, Global R&D, Kao Corporation, Japan.

Emile H. Ishida, Graduate School of Environmental Studies, Tohoku University, Japan.

The temperatures in Savannah Zone where termites live are 50° during daytime and below 0° at night. How is the temperature inside termite nests steadily maintained at 30°? Apprehension of this nature technology triggered the generation of power consumption-free air-conditioner. Why a shell of snail remains clean? The mechanism behind this phenomenon helped the development of building materials that remain stain-free when exposed to rainwater and also stain-resistant kitchen. The cleaning function of bubbles derived from the convection of heat and ultrasonic wave generated during bursting has led to the birth of no water bath.

We should learn from nature that is rich in technologies. Moreover, we could learn the wisdom of a new living style. We name such wonderful wisdom of nature as “Nature Technology.”

Despite many efforts being made to solve the environmental issues, the global environment continues to deteriorate. If nothing is done, this will trigger the collapse of civilization around 2030.

Now what we are being asked is to create a civilization based on the blessings of the sun and natural resources rather than strengthening the underground resources based civilization.

Nature created a sustainable society by repeatedly selecting natural processes that consumes very little energy to circulate materials in the most perfect way.

Now, such technologies are being born one after another and a new life style has come into existence. There is not much time left and now it is the time to turn the wheel largely from the underground resources based civilization to the civilization for our own existence.
**14.35 REACH: The Complexity of Communication in the Supply Chain.**
Erwin Annys, Director REACH/Chemical Policy, CEFIC, Belgium.

REACH has been seen correctly by industry as the most complex legislation existing in this world. The enormous number of guidance documents, practical guides and manuals only prove this statement. However only very limited guidance has been given for downstream users. Although their role and responsibility is completely different compared to a manufacturer or importer of substances and preparations, the communication in the supply chain is extremely important for them. It is not only a question of guaranteeing that their suppliers do register in time, but also a question of communication on the uses and the necessary information in order to allow that a use is covered. This is much more complex than estimated and the experiences so far should be used for the future registration deadlines. The consequences of putting a substance on the candidate list for the authorisation process is an additional difficulty that companies are confronted with. The presentation will handle the different difficulties that industry is confronting in this supply chain communication.

**15.05 Break**

**15.35 The Reset Economy and the Rise of the Rest.**
Julian Ho, Assistant Managing Director, Singapore Economic Development Board, Singapore.

Recovering from the worst economic downturn in 70 years, companies are recognising that doing “business-as-usual” is no longer effective in this new ‘reset economy’. The continued deterioration of public finances in developed economies contrasted by the continued strong growth of emerging nations have heralded a fundamental economic shift from the West to ‘the Rest’.

It is forecasted that growth will be driven by Asia, with China, India and the Association of Southeast Asian Nations (ASEAN) likely to become the world's largest economic bloc in the near future. Global companies across industries are moving into Asia quickly to capitalise on the region’s growth story. However, both multi-nationals and Asian enterprises alike are confronted with the challenges of Asia’s diversity and unique market needs as they seek to expand their market reach.

In this presentation, Julian will share insights on the opportunities in Asia, and in particular the role of Singapore, in building up core capabilities around consumer insights, research & development and creativity, that would support this growth.

**16.05 Defining the Future of Highly Eco-Friendly Washing through Innovation.**
Koichi Nakamura, Principal Researcher, Global R&D—Fabric & Home Care, Kao Corporation, representing the JSDA, Japan.

The consciousness of ecology, especially on the global warming, is growing rapidly.

In the past, the main issues of ecology in our industry had been the eutrophication of still waters of lakes, rivers, the toxicity and biodegradability of chemicals. Currently, the issue of CO₂ emission has become the big focus.

In Japanese, we have an ecologically meaningful word “Mottainai” to represent the total concept of eco-friendly activities: reduce, reuse, recycle and respect.

Influenced by this word/concept, consciously or even unconsciously, we have developed laundry products in the eco-friendly direction such as energy-, water- and resource- savings and the use of renewable resources.

In order to meet the demand of Japanese consumers who have historically been washing clothes at ambient temperature without heating which gives a big impact on the energy consumption, we have continuously made lots of efforts to boost the detergency in the low temperature and low bath ratio conditions using as much renewable resources as possible. Thus we have created the innovative combination of new surface active agents, used low-temperature-optimized enzymes and bleach activators. We also have improved the solubility of powder detergents.

For the saving of resources, we have developed concentrated detergents recommending the consumers to use the optimum amount of them and to use refills to reduce plastic consumption.

The current new topics of eco-friendly products in Japan are the launches of ultra-concentrated and rinse-water-saving liquid detergents.

As it has been done for the eco-issues, we will keep proposing innovative solutions for the consumers and society.

**16.35 Discussion**
Montreux 2010!

Day 3: Smarter Ways of Doing Things  
Thursday, 7 October 2010

Recognize the need to change the way we do product development as new technologies emerge.

Oral Presentations  ♦ Montreux Music & Convention Centre, Auditorium Stravinski

NOTE: Each session will have discussion time at the end of the session.

Morning

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

9.00  Introduction of Day 3.
  Thomas Müller-Kirschbaum, Corporate Senior Vice President, Henkel AG & Co. KGaA, Germany.

Creating a sustainable detergents industry is a challenge that will stimulate innovation and has the potential to transform our businesses over the next decade. It will change the ingredients we use, the concentration and format of the products we sell and the way that we wash. The industry will need to co-operate to bring consumers with us on the journey, because without major changes in both washing and purchasing behaviour then we will undoubtedly fail to make a meaningful improvement in our collective imprint. It will be especially important that we consider the needs of consumers from across our entire planet. A sustainable detergents business can only be achieved by tackling both ‘Developing & Emerging’ and ‘Developed’ markets and the focus of our efforts needs to be tailored accordingly.

9.15  Cleaner Clothes and a Cleaner Planet—What Will We Tell the Grandchildren?
  Randy Quinn, Executive Vice President Laundry, Unilever, United Kingdom.

During the last two decades, increases in the risk of global warming and potential energy supply shortages helped initiate many R&D activities around the globe. Many concentrated their efforts on energy saving potentials as well as environmental concerns which were reflected in various products today. Such economic organizations need to create products and systems that consider green growth.

In this regard, Samsung has also started its own transformation from a company simply delivering good quality products to an organization offering high quality lives. Furthermore, the corporation is extending its focus to researching and developing products that consider sustainability. Silver and Foam wash innovations are some examples of such product level energy saving technologies created by Samsung Electronics. However, this may not be sufficient to fulfill the tasks at hand in the future. The perspectives of such green growth go beyond energy and water consumption. They will focus around the human being as the center of the green environment. This talk will outline some examples of technologies that Samsung has identified to enable its innovative transformation.

10.15  Break/Visit with Poster Authors

10.45  From Now to Now What?
  Leif Huff, Partner & Managing Director, IDEO, Germany.

As we begin to emerge from the economic recession and head into the new normal, consumers are choosing more wisely what they consume, and businesses must do more than meet targets, sell more and cut costs. New questions about how to build a business that is meaningful, create products and services of resonance and impact must be addressed. In short, businesses must look beyond “Now” to “Now What”.

Drawing on successful examples from Europe and the US, Leif will talk about the significance of the business of “Now What”. He will cover new frontiers for inspiration, the importance of asking the right questions, evaluating iteratively and evolving innovative solutions, with strong consumer participation in the process.
Product development scientists are under increasing pressure to deliver new or improved consumer benefits across their brands and typically in a budget, resource and time constrained environment. The requirement is often described as ‘more from less’. High throughput (HT) technology has begun to be applied in product R&D primarily to accelerate formulation research. Although HT can be applied individually to virtually any element of the product development process (technology discovery, performance/structure mapping, formulation, physical properties etc) the impact can be multiplied when applied against an entire product development work process. The HT concept transcends simple automation: when designed correctly, high throughput solutions take advantage of a good understanding of the underlying science allowing for a wide range of chemical, physical, and performance measurements that correlate to key consumer brand attributes. Consumer testing will always be the final decision parameter. Well thought out HT solutions, however, represent the labs of the future, complimenting consumer testing with rapid delivery of comprehensive scientific data sets improving overall decision making. The end result is better choices earlier in the process, a reduction in the number of costly consumer panel tests, performance/structure mapping, formulation, physical properties etc and a reduction in the number of costly consumer panel tests, formulating a product that is more likely to succeed in the marketplace. The HT concept transcends simple automation: when designed correctly, high throughput solutions take advantage of a good understanding of the underlying science allowing for a wide range of chemical, physical, and performance measurements that correlate to key consumer brand attributes. Consumer testing will always be the final decision parameter. Well thought out HT solutions, however, represent the labs of the future, complimenting consumer testing with rapid delivery of comprehensive scientific data sets improving overall decision making. The end result is better choices earlier in the process, a reduction in the number of costly consumer panel tests, formulating a product that is more likely to succeed in the marketplace.
Hugo said: ‘There is nothing more powerful than an idea whose time has come’.

The core of my philosophy is responsible self-management, aligned with clear values and a clear personal vision and mission. This self-management is not an event, but an ongoing process. The principle centered approach requires constant engagement and discipline. Successful people daily utilize principles of effectiveness in their lives. Often, they are internally motivated by a strong sense of mission. Over time, they develop, internalize and live these principles. They have the discipline to use these principles consistently. Some people call principles guidelines or an internal guiding system. They use these principles to make choices. Principles are fundamentally within us which are used to steer our actions and help us to make decisions. If a person lives by these clear principles, he or she will be very consistent. In my speech I will focus on:
- Leadership
- 1:1 Coaching
- Psychology of Winning and Motivation

One of my core messages is, leadership is a choice... not a formal position.

To close I will focus on managing energy—not time.

15.35 Discussion

15.50 Closing Comments.
J. Keith Grime, President, JKG Consulting LLC, USA.
**Poster Presentations**

**Poster Chairs**

Andrew T. Hight, Unilever R&D Port Sunlight, United Kingdom.

Hans Juergen Scholz, Clariant Produkte (Deutschland) GmbH, Germany.

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

**Product**

Chair: Andrew T. Hight, Unilever R&D Port Sunlight, United Kingdom.

**Novel Softening Through the Wash Technology for Fabric Washing Washing Liquids.** M.E. Calvert, S.D. Johnson, and PI. Shud, Croda, Snailth Goole, East Yorkshire, United Kingdom.

The market segment for 2-in-1 laundry detergents is growing as producers want to offer alternatives to current brands that dominate the market. Existing technologies are heavily patented and force compromises for consumers in the cleaning performance of the detergent.

Recently, a completely novel liquid softening through the wash technology (Cirrasol ST Ultra) has been developed that overcomes the drawbacks of existing technologies. Formulators can easily produce 2-in-1 laundry formulations that provide a perceivable softening benefit without affecting the performance of the detergent. The softening performance of this novel technology has been proven by an independent test house (WFK).

Cirrasol ST Ultra has a high renewable carbon content. It is suitable for concentrated detergents and removes the need for a separate fabric softener, thereby contributing to improved overall sustainability in the laundry area.


“Polysorbates” TWEENs of various fatty-acids with different polyethylene glycol units are used in emulsion and dispersion formulations for various applications. Typically stable emulsions such as parenteral emulsion but also instable emulsions such ice cream mixes are stabilized with TWEENs. More surprisingly, the same TWEEN 80 can be used to stabilize these both types of emulsions.

In ice creams, TWEEN is used to improve the melting with respect to room temperature. The maintenance of the macrostructure of ice creams is one of the important characteristics of an end product. The fact that the ice cream does not weaken completely during the fusion of the ice is due to the texturing character of lipid in form of triacylglycerols and lipid emulsifiers like monoglycerides or TWEEN 80. The texture of the ice cream is mainly due to the crystallized droplets which are partially coalesced.

When furthermore the crystallization of water occurs, water is no longer available to create the same mesomorphic phases at positive temperatures. In fact, other mesomorphic phases will be created in the presence of the ice. The result is equivalent to a displacement along the axis of the concentrations, in the emulsifier/water phase diagram. In this study we will show the behaviour of a TWEEN80/H2O system in the case where water is subtracted from the equilibrium condition by freezing. A phase diagram approach of TWEEN80/water will be provided.

**QuestLock (G2)—A New Dissolvable Granular Builder for Detergent Systems.** R. Lock, D. Kennedy, and A.K. McClellan, Amcol Minerals Europe, Winsford, Cheshire, United Kingdom.

QUESTLOCK 2 is a novel builder primarily for use in powdered laundry detergents and combines the desired properties of optimum water softening, anti-redeposition of soil and detergency. Based, in part, on a proven “silicate-carbonate” technology, QUESTLOCK 2 can be used as a part replacement for STPP or a direct replacement for “zeolite-polymer” builders. As a truly multifunctional product, QUESTLOCK 2 has been shown, under critical test conditions, to exhibit significantly reduced fibre encrustation on fabrics when compared with zeolite-built detergents. With a water dissolution profile comparable to STPP, Questlock 2 also possesses enhanced....
Test materials for assessing the cleaning performance of washing processes

- Standardised soiled test fabrics
- Development of soilings
- Unsoiled control cloths for laundering processes
- Colour transfer monitors
- Test cloths for colour fastness
- Pilling standards
- Reference detergents
- Standard paper
- Test materials for leather

EMPA Testmaterials Ltd
Mövenstrasse 12
CH-9015 St.Gallen
Phone +41 71 311 80 55
Fax +41 71 311 80 57
info@empa-testmaterials.ch
www.empa-testmaterials.ch
calcium and magnesium sequestration compared with zeolite builders.

QUESTLOCK 2 offers a significant benefit over zeolite builders with at least 40% less QUESTLOCK 2 by weight required c.f. zeolite to achieve equal stain removal performance when tested in numerous market leading detergents.

The combination of a novel formulation and AMCOL granulation expertise, QUESTLOCK 2 is a free-flowing builder granulate that can be added directly as a dry powder to the active detergent formulation.


The shift toward low temperature wash and compact detergents has created the need for a new class of detergent ingredients. L-Lysine tetramethylene phosphate (LTMP) is a new chelating agent derived from a renewable feedstock (the lysine amino acid). It exhibits an outstanding performance when used as a co-builder in laundry and dishwashing detergents. It delivers consumer noticeable benefits at low inclusion level as of low temperature.

In laundry home detergents, the soil removal index of LTMP containing formulations on 14 standard stains washed at low temperature is significantly higher than reference detergents containing traditional phosphonates. LTMP is also improving the secondary cleaning on synthetic fibres (polyester-cotton and polyamide) compared to standard phosphonates. A clear anti-redeposition effect has been evidenced by recognised test methods.

The performance of L-Lysine tetramethylene phosphate in domestic automatic dishwashing detergents will also be presented.

**Characteristic Aggregation Behavior of Skin Mild Anionic Surfactant, Sodium POE Alkyl Ether Carboxylate.** R. Kato¹, N. Toshida², T. Sakai¹, and N. Subirats². ¹Kao Corporation, Wakayama-shi, Wakayama, Japan, ²Kao Chemicals Europe, S.L., Barberá Del Vallés, Spain.

Sodium poly (oxyethylene) alkyl ether carboxylate (EC) is known as a skin-mild anionic surfactant, and has been widely used for skin or hair cleansing agents because of its solubility in water with/without calcium ion. We are investigating physicochemical properties of EC in order to bring out the nature of EC, which causes its particular properties. Aggregation behavior of EC (EO = 4 (single), neutralized with 1.0 eq. of NaOH) has been studied by equilibrium surface tension, solubilization of an oil soluble-dye, steady-state fluorescence, dynamic light scattering (DLS) and transmission electron microscope (TEM) measurements. The surface tension curve of EC showed multiple break points caused by vesicle formation of EC dimer, which is composed of EC salt and unneutralized EC, and vesicle to micelle transition in dilute aqueous solution. These unique properties are supposed to come from existence of carboxylic hydrophilic group and also come into its mildness for skin or cleansing performance.

**A New Eco-friendly Hair-Conditioning Cationic Agent—The Characteristic Aggregation Behavior in Aqueous Solutions.** T. Sakai¹ and P. Caslani². ¹Kao Corporation, Wakayama-shi, Wakayama, Japan, ²Kao Chemicals Europe, S.L., Barberá Del Vallés, Spain.

A new eco-friendly conditioning agent, C-22 Amido-propyldimethylamine (APA-22) salt, is excellent not only in biodegradability and acute aquatic toxicity but also in hair-conditioning effects, in spite of a cationic surfactant. Moreover, APA-22 salt shows more water-soluble than APA-18, which has a shorter hydrophobic chain. This water solubility is thought to be caused by the characteristic aggregation behavior in aqueous solutions. With increase in the concentration of APA-22 salt, unilamellar vesicle and lamellar particles, which cannot be formed by APA-18, are formed. This typical aggregation behaviour is thought to be due to the longer alkyl chain. Then, the behaviour is highly affected by the kind of acid used to be neutralized, too. We are expecting a close relationship between the characteristic nature of APA-22 in aqueous solutions and its excellent hair-conditioning effects.


Chelants, in particular phosphonates, are well-established ingredients in laundry detergents and are used to stabilise peroxygen species, help stain removal, and inhibit scale formation in washing machines.

In recent years EDDS ([S,S]-Ethylene diamine disuccinate) has emerged as an effective alternative chelant since it is highly selective for transition metals and has the additional benefit of being readily biodegradable.

This poster will publish results on the comparative wash performance of phosphonates and EDDS in terms of per-acid stability, stain removal, and dye damage. It will also look at the use of blends to optimise performance and scale inhibition.

This poster will demonstrate that EDDS offers a unique combination of good stain removal and dye damage protection, stabilisation of per-acid in solution, biodegradability, and low wt% dosing. It will also show that blends of EDDS and phosphonates can be used with the same benefits.

**Antifoams as Rinse Aids in Hand Wash Softeners Formulations.** L. Gallez¹ and A. Pinheiro². ¹Dow Corning s.a., Seneffe, Belgium, ²Dow Corning do Brasil Ltda, Hortolândia, Brazil.

Today, a large portion of the world’s population is still washing their clothes by hand or in semi-automatic machines. When doing so, consumers usually like to see a lot of foam as they associate foaming with detergent efficiency. However, removing the lather requires numerous rinse steps which are painful and time consuming for consumers and a waste of water for the environment. To address these needs, hand wash rinse cycle fabric softeners with rinse aid performance were introduced on the market several years ago. Dow Corning has developed defoamers for this specific application. It has been demonstrated that adding these products at a cost-effective level to different hand wash softeners reduces rinsing effort and saves significant amounts of water. This poster describes the performance of softer formulations containing Dow Corning additives tested in semi-automatic machines used in Brazil (tanquinhos), allowing clear rinsing water as of the first rinse.

**Laundry Liquids, Continuous Challenge in the Surfactant System.** H. Kola and F. Pala, Battelle, Duxbury, MA, USA.

Since the end of the 80’s, the detergent industry has introduced numerous technical developments such as compact powders, concentrated liquids, powders with incorporated activated bleach, color versions, tablets and recently super-concentrated laundry liquids, showing that this field is in permanent state of evolution. It is essential for both detergent manufacturers and suppliers of...
ingredients to keep abreast of this influx of new products and formulations in what has become a truly global market.

The purpose of this study was to compare the surfactant system present in the major brands of laundry liquids sold in Western Europe and North America during 2006-2008, and to trace the introduction into these markets of the new super-concentrated laundry liquid. State of the art analytical techniques were use to quantify and characterize the different surfactants, i.e., hydrocarbon chain length, oxo- or oleo alcohol-based surfactants and other ingredients present in the laundry liquid formulations.

High Performance Acidic Cleaners with Improved Ecotox Profile. Stefan Fassbender, Juergen Tropsch, and Alfred Ruland, BASF SE, 67056 Ludwigshafen, Germany.

Many different solutions are being offered to meet growing market requirements for products with a good ecotox profile. Often, however, compromises are made with regard to the performance of such products. But by using innovative raw materials, it is possible today to manufacture acidic cleaners that both meet the increased requirements for more ecologically compatible products and have greatly improved product properties.

An innovative raw material that is available for acid cleaning systems is methanesulfonic acid, which combines many advantages in a single product:
- Better performance than conventional acids
- an improved ecotox profile (no VOC, no phosphate) and
- reduced corrosivity

New technical results are presented that confirm the advantages of MSA based systems with the calcium and iron deposits that often occur in household and industry. Additional, synergistic effects in terms of the cleaning performance when combined with other eco-friendly cleaner components have been found and are also presented.

Consumer Product Ingredient Safety: Exposure and Risk Screening Methods for Consumer Product Ingredients. R.I. Sedlak¹, P.C. Deleo², and H. Sanderson², ¹American Cleaning Institute (formerly The Soap and Detergent Association), Washington, DC, USA, ²University of Aarhus, National Environmental Research Institute, Roskilde, Denmark.

Ongoing chemical management programs around the world are focusing on both legacy and high production volume chemicals. The consumer products industry compiled a book that contains valuable specific exposure information, as well as a comprehensive overview of screening methods to facilitate these programs. We will present the methodologies and specific consumer exposure information that can be used for screening-level risk assessments of environmental and human exposures to chemicals through the manufacturing and use of consumer products, mainly cleaning products. These approaches can be applied generally to other consumer products and their ingredients. The methodologies allow hazard information to be put into context by using exposure information to characterize potential risk. The presentation is illustrated using examples from global chemicals management programs. Because of the large numbers of chemicals under investigation in global chemical management programs, there is a specific need for category assessments, hence these are also illustrated.

Don’t leave it up to chance...
A New Developmental, Biodegradable Biopolymer Technology for the Detergents Markets. Dallas Hetherington, AkzoNobel Surface Chemistry AB, Bridgewater, NJ, USA.

A new biodegradable biopolymer technology for the detergents markets has been developed recently. Based upon the combination of selected polysaccharides and synthetic monomers, the Hybrid Polymers of this technology biodegrade in the environment, offer a smaller carbon footprint, and are effective in replacing synthetic polymers in detergent formulations such as automatic dish wash systems and laundry detergents. This new technology is different from previous biopolymer attempts, because it promises to be a new, more cost effective approach to a more sustainable future.

The poster will present details on these Hybrid Polymers, their performance in automatic dish-wash and laundry detergents, as well as environmental aspects, including the results of lifecycle analysis performed on a prototypical Hybrid Polymer versus its synthetic analog.


Cationic hydrotopes/co-surfactants have been used in industrial and institutional hard surface cleaning for many years. Cationic hydrotopes have been used not only as hydro tropes but also as cleaning booster agents, which allows use of less surfactant and thus less impact on the environment. To further improve environmental profile, a large number of alternatives to the old generation of hydro trope have been developed in the recent decade. However, the known alternatives are in many cases not presenting sufficient performance, especially when good cleaning and degreasing properties at low concentrations are desired. This phenomenon, boosting the cleaning performance at low concentration of total surfactant, has been studied by looking at correlation between different surface activities and cleaning performances.


Encapsulated silicone antifoams are commonly used in heavy duty detergent powders for their excellent cost/performance and stability.

The actual automatic dishwashing (ADW) detergents surprisingly do not include detergents anionic surfactants in their formulation mainly due to the detrimental impact foam generated would have on the washing process without the use of a suitable foam control agent.

A new high performance encapsulated silicone antifoam technology capable of controlling foam in a surfactant-based ADW composition and washing process has been recently developed.

The technology is water soluble, does not cause silicone build-up on dishwasher or machine parts while exhibiting very good foam control.

In the context of improving sustainability (lower wash temperature) and to meet potential new regulatory requirements (non-P), significant reformulating efforts are foreseen in the ADW application in the near future. Dow Corning’s new antifoam technology proposition could allow more flexibility and innovative cleaning approaches in ADW detergents reformulation.

New Surfactants from Renewable Resources. C. Gariepy, Stepan Company, Northfield, IL, USA.

Consumer and Industrial/Institutional products have seen steady growth in the ‘green’ sector of the market. The main drivers being compaction, reduced energy usage, and improved environmental sustainability profile. To assist formulators in achieving their sustainability goals, Stepan Company has based their R&D on one of its core competencies: sourcing surfactant raw materials from renewable resources. In addition, new surfactants can make significant improvements throughout the life cycle. Two novel products, Stepan-Mild® L3 and Sulfonated Oligomeric Surfactants, are prime examples. L3 is a 100% natural carbon derived secondary surfactant for Personal Care cleansing products. Key benefits include enhanced skin feel and cost performance via actives reductions. Sulfonated Oligomeric Surfactants afford a unique combination of physical solution properties. Key benefits include high water solubility, low-viscosity systems, and very low-foaming. These properties enable highly concentrated formulations. Various aspects of performance evaluation including methodology, formulation, and performance results will be presented.

Technology

Removal Efficiency of Model Contaminants by Ultrasonic Waves Evaluated with Microscope Image Processing. Y. Tagawa1 and K. Gotoh2, 1Kobe University of Fashion and Design, Japan, 2Nara Women’s University, Japan.

The removal of contaminants from poly (ethylene terephthalate), PET, film was investigated in aqueous solutions using a frequency-modulated ultrasonic cleaning apparatus. Carbon black or dyed oleic acid as model contaminants was deposited onto the PET film. After the ultrasonic cleaning, the removal efficiency was calculated from the total area of the contaminant deposited on the PET film obtained by the microscope image processing. The removal efficiency increased with time and remained almost the same after 5 minutes. The apparent equilibrium removal efficiency was found to increase with increasing ultrasonic sound pressure. For both contaminants, the removal efficiency was enhanced by adding sodium hydroxide. In the presence of sodium dodecyl sulfate, the oil removal was promoted, whereas the detergency of carbon black considerably decreased. This suggests that the control of the mechanical action by cavitations is a key for the application of ultrasonic waves to cleaning of solid surfaces in detergent solutions.

Application of Artificially Soiled Multifiber Fabric to Detergency Evaluation of Textiles. Keiko Gotoh, Faculty of Human Life and Environment, Nara Women’s University, Kitaouya-nishi-machi, Nara 630-8506, Japan.

The evaluation of textile detergency was carried out using artificially soiled multifiber adjacent fabric (MFF) composed of six different warp regions. The MFF soiled with model water-soluble, oily or particulate contaminant was cleaned in water, water/ethanol (1/1 in volume ratio), ethanol and n-decane with the stirring as a mechanical action. The detergency of the each fiber region was determined from the change in surface reflectance of
the corresponding region due to cleaning. The soil removal was strongly dependent on contaminant, fiber and liquid species, indicating that the detergency was dominated by the dissolution of the contaminant into the washing liquid and the affinity between the contaminant and the fiber surface. The addition of alkali and surfactant to water or the solubilization of water into n-decane considerably increased the soil removal. The experimental results were not in contradiction with common and well-known knowledge about textile washing. Therefore, the artificially soiled MFF can be utilized for the detergency evaluation for textiles.

**Oily Soil Detergency Using Microemulsion-Based Formulations: Mechanism of Oil Detachment.** Sumaeth Chavadej1,2, Parichat Tanthakit1,2, John Scamehorn3, David Sabatini3, and Veerapat Tantayakom4, 1The Petroleum and Petrochemical College, Chulalongkorn University, Bangkok, Thailand, 2Center for Petroleum, Petrochemicals, and Advanced Materials, Chulalongkorn University, Bangkok, Thailand, 3Institute for Applied Surfactant Research, University of Oklahoma, Norman, Oklahoma, USA, 4PTT Chemical Public Limited, Bangkok, Thailand.

The removal of palm oil from a polyester/cotton blend fabric was investigated using an anionic extended surfactant and nonionic secondary alcohol surfactant under conditions corresponding to ultralow interfacial tension (IFT) microemulsion formation. The oil removal for this microemulsion-based formulation could exceed 90% which was higher than that for either component surfactant alone or for a commercial laundry detergent. The maximum oil removal was found to correspond to the minimum equilibrium and dynamic IFTs. Higher oil contact angles and shorter oil droplet detachment times were found to correspond to higher detergency. The high-speed photos revealed the oil detachment by the snap-off mechanism for these ultralow IFT systems.

**A Study on the Properties of Nonylphenol Ethoxylates Substitutes.** Jeong Ki Ha, Hui Chan Kim, Kyung Jun Kim, Hong Ji An, and Eunju Park, Honam Petrochemical Corporation, Daejeon, South Korea.

Nonylphenol ethoxylates (NPEs) which are one of the nonionic surfactants are inherently biodegradable. NPEs do not exhibit endocrine effects but NP is only weakly estrogenic material. The use of NPEs has been decreased in Korea, Japan and EU. In this study, Tridecyl alcohol ethoxylates (TDEs) and tridecyl alcohol ethoxylate propoxylates (TDEPs) which were TDE added with propylene oxide (PO) at the TDEs end group were used in the substitute of NPEs. The emulsion stability of TDEPs was more stable than one of TDEs and NPEs. The emulsion stability was increased with PO addition at TDEs end group. The emulsion particle size of NPE-10 was 7.5 μm and one of TDE-9 and TDEP-92 which was TDE-9 added with PO 2 moles at the TDE-9 end group was 4.8 μm and 5.3 μm. The emulsion particle sizes of TDEs and TDEPs were smaller than one of NPEs. TDEPs emulsion particle size was larger than TDEs because of molecular structure. The diffusion coefficients were able to be measured by dynamic surface tension. The diffusion coefficient of TDEPs was higher than NPEs and was increased with PO addition at TDEs end group. The propylene oxide additions in TDEs were affected in properties of TDEs. From these results, TDEs and TDEPs were expected to be one of the NPEs substitutes.
Novel Method to Assess the Sanitation Efficacy of Laundry Processes (HyWa-Check). Caroline Amberg, Daniel Faeh, and Felix Frey, EMPA Testmaterials ag, St. Gallen, Switzerland.

To this day, the effectiveness of washing processes is expressed as good stain removal. It is supposed that a good performance means a good microbial reduction too. But this claim was never proved. Because of several trends in the laundry field, like decreasing temperatures and water consumptions, extended use of color liquid detergents, and changes in lifestyle, it is expected that more hygienic problems may occur e.g. bad odor of washed textiles and washing machine, and in the worst case, laundry-mediated diseases.

To face this problem, a fast and safe method to determine the hygiene performance of textile washing processes was developed. The method bases on storable, contaminated carriers and a semiquantitative detection method. The use of risk class I test germs allows the screening of the sanitization efficacy of new programs and products in a non-microbiological lab. The novel HyWa-Check method delivers comparable results with the NSF Protocol P172.

Spontaneously-generated Solubilization of Oleic Acid by Methyl Ester Ethoxylates (MEE). Yukihiko Kaneko1, Chika Kobayashi1, Sara Miura1, Tomomichi Okano1, Takahiro Okamoto2, and Hiromitsu Takaoka2, 1Dow Corporation, Functional Materials Research Laboratories, Edogawa-ku, Tokyo, Japan, 2Dow Europe GmbH, Horgen, Switzerland.

The rate and extent of solubilization and liquid crystallization of oleic acid in nonionic surfactant micelle solutions at neutral pH with no external stirring were measured by video microscopy and small angle X-ray scattering (SAXS). Methyl ester ethoxylates (MEE) and alcohol ethoxylates (AE) were used as surfactants. Spontaneously-generated solubilization of oleic acid were observed when a oleic acid drop was injected into aqueous solutions of MEE. The drop volumes decreased by amounts ranging from 10% to 30% and the micelle diameter increased by almost 30% in less than 30 min. Liquid crystallization of oleic acid were observed in aqueous solutions of AE. The drop volumes increased by amounts ranging from 200% to 250% and the micelle diameter was almost constant in 30 min.

Cellulosic Polymers for Enhanced Sensory Appeal in Hand Dish and Hard Surface Cleaning Formulations. R. Krasnansky1 and F. Alam2, 1Dow France S.A.S., Valbonne, France, 2Dow Europe GmbH, Horgen, Switzerland.

This poster investigates the multi-functional interaction of a range of different cellulosic chemistries within different cleaning formulations. Hand dish and hard surface cleaning formulations are examined in more detail, along with the benefits that the use of cellulosic polymers can provide to the formulator and user.

Cellulosic polymers are multi-functional materials which are derived in part from renewable resources, and therefore contribute to progressive sustainability improvements. Currently, cellulosic materials are not typically used in these applications.

Design of polymeric materials, e.g. modifying the hydrophobicity, molecular weight, and charge substitution on a cellulose backbone can produce a wide variety of different structures which have novel or unique properties to deliver enhanced skin sensory, foam design, and surface modification benefits, which are highly desirable in hard surface and hand dishwashing liquids. Investigation into these effects and the structural/performance relationship offers many new benefits.

Glass Transition Behavior of Octyl-β-D-glucoside and Octyl-β-D-thioglucoside/Water Binary Mixtures. S. Ogawa and S. Osana, Keio University, School of Fundamental Science and Technology, Yokohama, Japan.

The aqueous solution of two kinds of glucosides, octyl β-D-glucoside (C8Glu) and octyl β-D-thioglucoside (C8SGlu) were evaluated in terms of the lyotropic properties and glass-forming behaviors by the differential scanning calorimetry (DSC) and the polarizing optical microscopy (POM).

These lyotropic mixtures formed glasses when they were placed under the supercooling state. At the same time, it was confirmed that they were composed of some kinds of liquid crystals such as cubic, lamellar, and smectic, in accordance with the temperature.

The glass transition temperature (Tg) of the mixture was strongly dependent on solute concentration, with a higher concentration correlating with a higher Tg. The experimental Tg was consistent with the predicted value calculated using the Couchman–Karasz equation in both the C8Glu and C8SGlu/water mixtures. The change of heat capacity at Tg showed the two bending points under variation of concentrations. And the highest temperature of phase transition from lamellar to isotropic solution was observed in the systems at around 50% molar concentration. It was supposed that another different states of water existed in extremely higher concentration ranges.

Formulation and Optimisation of Super-concentrated Liquid Laundry Detergents for Enhanced Stability and Detergency. M.J. Escudero1, C.A. Prieto1, J. Lázaro2, and L. Prieto2, 1CEPSA R&D Center, Alcalá de Henares (Madrid), Spain, 2CEPSA Química, San Roque (Cádiz), Spain.

The A.I.S.E. Laundry Sustainability Project for Heavy Duty Liquids intends to develop optimised formulations enabling consumers to achieve at the lower recommended dosages a final performance at least equivalent to previous more-diluted formulations. Hence, different liquid concentrated detergents have been launched recently comprising 40–45 % of surfactants and reducing two or three–fold the dosage. In the next future, even higher–active concentration products will be demanded.

The main target of this work is to formulate HDLs with surfactant systems above 50 % showing good stability, no–phase separation and enhanced performance. Selected formulations comprising linear alkylbenzene sulfonate, alcohol ethoxylate, and alcohol ethoxysulfate are tested. A mixture ‘composition–property’ design of experiments is proposed to study the influence of surfactant combinations in the stability (cloud point), performance (soil removal from stained fabrics) and phase behaviour (rheometry). Finally, the surfactant block is optimised for improved detergency and stability based on a simplex optimisation program.

Current Perspective: Realizing Performance Benefits through Alcohol-based Surfactant Optimization. E.E. Endler1, J. Barnes2, and S.N. Papitto1, 1Shell Global Solutions (US) Inc., Houston, TX, USA, 2Shell Global Solutions International B.V., Amsterdam, The Netherlands.

Consumer cleaning product formulations continue to evolve. The most prominent example has been the significant and continued increase of liquid products in the market. The shift to liquids from
powders enables the product formulator to take advantage of a wider range of surfactants. The selection of surfactants for a particular application is based on several criteria, including economics, performance, availability, and ease of processing. Surfactants based on modified-oxo alcohols provide formulation flexibility and an opportunity to balance these many criteria.

Recent results at representative wash conditions demonstrate performance benefits of alcohol-based surfactants in laundry and hand dish formulations, including alcohol ethoxylates, alcohol ethoxysulfates, and alcohol sulfates based on modified-oxo alcohols. Moreover, it is possible to reduce overall surfactant content while maintaining defined performance by replacing a non-alcohol-based surfactant with an alcohol-based surfactant. The influence of physical properties on performance will also be discussed.

New UOP/CEPSA Detal-Plus™ Process Technology for the Production of Linear Alkylbenzene. G. Peterson1, L. Erickson1, M. Riley1, I. López2, A. Fernández2, and E. Salvail2, 1UOP LLC, Des Plaines, Illinois, USA, 2CEPSA QUIMICA, Madrid, Spain.

Linear alkylbenzene sulfonate (LAS) continues to be the workhorse surfactant throughout the detergent industry. LAS and its precursor, linear alkylbenzene (LAB), have also evolved out of the need for a more biodegradable surfactant. This has led to changes in LAB product specifications and LAB production technology.

The most significant change in LAB production technology in recent years has been the development of the Detal™ process for solid bed alkylation. The Detal process was jointly developed by UOP and CEPSA QUIMICA (formerly PETRESA) and it was successfully commercialized in 1995. Prior to this development, LAB producers used alkylation technology that relied upon hydrofluoric acid as the catalyst. Since its introduction in 1995, the Detal process has been the alkylation technology of choice in LAB capacity additions.

The advancement of UOP’s LAB production technology continues today with the introduction of the new UOP/CEPSA Detal-Plus process which incorporates the transalkylation of heavy alkylbenzene by-product into more valuable linear alkylbenzene product. This poster provides an update on this latest advancement in UOP LAB production technology and illustrates how it delivers value by reducing the operating and capital costs for LAB plants.

Fueling Linear Alkylbenzene Production: Normal Paraffin Production from Kerosene. L. Erickson, G. Peterson, S. Raghuram, and S. Sohn, UOP LLC, Des Plaines, Illinois, USA.

The demand for normal paraffins in the appropriate carbon number range and linearity needed for use as the principal feedstock in linear alkylbenzene (LAB) manufacture continues to increase worldwide in step with the increasing use of biodegradable detergents. The primary processing route for the production of normal paraffins from kerosene is well established using UOP’s Molex™ process technology. This poster will review the important features, benefits and advantages of this liquid-phase technology from technical and economic perspectives. In addition to discussing the technology in detail, the poster will demonstrate how the Molex process can enable users to maximize the value of by-product return streams by producing Jet A-1 quality. UOP’s Molex process is the technology leader and provides the most
Effective Removal of Starch Containing Soils in Auto Dish Wash. Kati Schmidt1, Markus Hartmann1, Ulve Freudenberg2, Carsten Werner3, Torsten Wieprecht*, and Alfred Ruland1, *1BASF SE, 67056 Ludwigshafen, Germany, 2ZetaSCIENCE, 01307 Dresden, Germany.

Effective removal of starch containing deposits from ceramic surfaces in Auto Dish Wash often remains an unmet challenge. Defined and reproducible testing strategies are essential for the successful development of effective cleaner systems. To address this need, we introduced a system of model coatings made from important food components including starch and casein. The biopolymer preparations were deposited onto silicon oxide surfaces mimicking ceramic materials. Using these ‘model deposits’ cleaning experiments were performed by applying a set of complementary analytical methods, including quartz crystal microbalance (QCM), ellipsometry and confocal laser scanning microscopy (C-LSM).

With this approach, we were able to reveal basic principles governing the adhesion of starch and starch-casein (protein) layers to silicon oxide surfaces and their removal. In particular, the influence of time, temperature, pH, ionic strength (water hardness) and the addition of different cleaning substances was systematically investigated. Emphasis was put on the impact of chelating agents and other builders. It was found that MGDA outperformed other chelating agents, an effect that can be boosted further by combining MGDA with certain polycarboxylates.


The poster illustrates the main features of the newly developed Desmet Ballestra ‘Enhanced Loop Reactor’ which, thanks to the newly conceived, double acting, gas-liquid mass transfer, presents several outstanding advantages with respect to the other technologies available on the market, namely:
- Higher reaction rates, thanks to the very efficient heat and mass transfer systems, which allows to optimize the reaction batch times.
- Higher quality products with a very low content of impurities and with homogeneous molecular weight.
- Low operating pressure due to the extremely high efficiency of mass transfer system.
- Higher safety due to the absence of rotating parts in contact with alkylene oxides in gaseous phase.
- Higher safety due to the fact that the reactor walls are fully wetted so to avoid accumulation of alkylene oxides in gas phase and hot spots formation.
- Capability to produce high molecular weight PEG in a single reaction step.


The quartz crystal microbalance with dissipation monitoring (QCM-D) has been used to develop a new methodology for the design and optimisation of cleaning formulations for both oily and particulate soil removal, the two main soil types encountered in laundry and hard surface cleaning applications. To be able to quantify soil removal and understand the cleaning mechanism is vital for the industrial design of new, more efficient and environmentally friendly cleaning formulations.

The quartz crystal surface is covered with a layer of model dirt and mounted in the QCM-D apparatus. The cleaning solution is then added to the system and the amount dirt removed is continuously monitored as a function of time. The QCM-D gives information about the mechanism of the soil removal, such as possible penetration of the cleaning solution into the oily dirt before it is removed, the viscoelasticity of the layer and the rate of soil removal.

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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:

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B. Boycotting, blacklisting, or unfavorable reporting;

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.
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Day 1—Defining the Future

**J. Keith Grime, President, JKG Consulting LLC, USA; President, AOCSC; Adjunct Professor, Northwestern University, USA.**

Keith Grime retired from Procter & Gamble in late 2007 as Vice-President of Corporate R&D, then set up his own consulting company JKG Consulting LLC. He consults with several multinational corporations in the chemical, consumer products and high tech ‘silicon valley’ industries. His consulting work focuses on R&D Effectiveness and Innovation Strategy and its integration into business development.

Grime has a long experience with 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 AOCSC Board of Governors for AOCSC since 2004 and held several positions until he was elected President in May 2010.

Keith Grime is a frequent speaker at innovation forums and is no stranger to Montreux. He has served as speaker on several occasions, has been a session chair, an Executive Committee member, and a co-chair for the conference since 1992. He is currently General Chair for the 7th World Conference on Detergents.

**David R. Duncan, President, DRD Consulting, United Kingdom.**

David Duncan began his working career with Procter & Gamble, where he spent the first eleven years in a series of roles developing detergent and personal care products. This was followed by three years at Sterling Winthrop in drug research. Subsequently he joined the SC Johnson Wax R&D group, where he held a number of management roles. These included working on Household products, Personal Care, Packaging, Product Safety, and the Environment. He joined Unilever in Brussels in 1995 and one year later was appointed to Senior Vice President R&D, Unilever Home and Personal Care (HPC) Europe. In 2001, he returned to the UK to take on a global role as SVP Development Integration in the newly formed HPC Division. He was promoted to SVP R&D Home and Personal Care in January 2003, with responsibility for all technical aspects of the 18 billion Euro HPC business.

He has been a member of the AOCSC Board of Governors for AOCSC since 2004 and held several positions until he was elected President in May 2010.

David holds a 1st class honours degree in Chemistry, is a Fellow of the Royal Society of Chemistry, a Chartered Chemist, a Chartered Scientist, a member of both the American Oil Chemists’ Society, and the American Chemical Society.

**Bill Schmitz, North American Equity Research, Cosmetics, Household and Personal Care Products Analyst, Deutsche Bank Securities Inc., USA.**

Bill Schmitz analyzes North American household products and personal care companies and has been recognized in the Institutional Investor and Greenwich Associates polls and the Wall Street Journal "Best of the Street" edition for his research on the group and by Starmine for the accuracy of his earnings estimates. He joined Deutsche Bank in 2001, starting as a member of the global consumer staples strategy team and as the mid-and small-cap household and personal care analyst. Prior to joining the firm, Schmitz was in the acquisitions group at Safeguard Sciences, Inc., a holding company for technology concerns and a principal of TSX Ventures, a Safeguard-controlled venture capital firm. Before Safeguard, Schmitz was an Associate in the Mergers & Acquisitions Department at PaineWebber Inc., where he specialized in advising consumer product and retailing clients in a variety of M&A transactions. Schmitz earned a B.A. from Brown University, with a dual concentration in organizational behavior management and history. He is a member of the Consumer Goods Technology Financial Advisory Board.

**Chris DeSoiza, Vice President, Milliken Research, USA.**

Chris DeSoiza was born in Milford, Connecticut and spent his formative years in Sarasota Florida. He received his BS in Chemical Engineering from the University of Florida and his MS in international logistics from Georgia Tech.

He joined Milliken as a senior research engineer in 1986 and has held numerous positions in the development, manufacturing, global planning, and business arenas prior to becoming vice president of Milliken Research Corporation. DeSoiza is responsible for all corporate R&D and the company-wide initiative for Profitable Growth through Innovation.

DeSoiza is on the Technical Advisory Board for the Institute of Textile Technology, is a member of the board of the Chemical Engineering Department at the University of South Carolina, and the board of South Carolina Research Authority, INDA (Nonwoven Association), and is the company representative to the Nonwoven Cooperative Research Center.
WHICH HOUSEHOLD GOODS WILL HE BE BUYING ONE DAY?

Which is going to win out: a product’s convenience, its environmental impact, the brand name, a bargain price? Whatever it is, we will work with you to develop solutions for tomorrow’s successful products. That’s why we already supply more than innovative silicone products for foam control in detergent formulations, or for endowing fabric softeners with additional features. We offer you 70 years of inventiveness and creativity as well as our own applications labs and production facilities around the world. And we have people who are dedicated to serving you and your market. Why not put us to the test? We care. Visit us at www.wacker.com/household
■ Stefan Silber, Vice President Research & Development, Evonik Goldschmidt GmbH, Germany.

Stefan Silber received his PhD in Chemistry at the Heinrich-Heine-University of Düsseldorf in Germany in 1991. He then joined Evonik Goldschmidt’s business line Tego Coating Additives being first responsible for an applied technology group before he took over the responsibility for the whole R&D group in 1994. Silber stayed in that position until 2002, bringing forth a plethora of unique innovative additives for inks and coatings, and driving the change towards more environmentally friendly inks and coatings. The next year he became head of R&D of Evonik Degussa’s business unit Oligomers & Silicones, and from 2006 on he headed R&D for Care & Surface Specialties. Since 2008, Silber has acted as senior vice president heading the innovation management of Evonik Degussa’s Consumer Specialties business unit, where he is globally responsible for all R&D activities.

■ Rodrigo Olmedo, Director-General, DETERTEC S.A., Ecuador.

Rodrigo Olmedo has been Director-General of DETERTEC S.A. since 1994. Under his leadership, the company has come to constitute a unique consumer understanding group with expertise and credibility in the field of brand and product innovation in the global consumer market. He has participated directly on projects focused on developed and less-developed realities, including markets in Western Europe, Eastern Europe, China, South East Asia, Latin America, and Africa. With more than 26 years of experience in consumer products, Olmedo is now an international expert combining uniquely two different abilities, ethnographic praxis applied to industry and creative experimentation (in-vivo, -vitro and -silico). He has a degree in Chemistry from Catholic University in Quito, Ecuador (1984).

■ Paul Polman, CEO, Unilever, United Kingdom.

Paul Polman earned a BBA/BA from the University of Groningen, Netherlands in 1977, and an MA in economics and an MBA in finance/international marketing from the University of Cincinnati in 1979.

Polman began his career at Procter & Gamble in 1979, with finance assignments in Belgium, the Netherlands, and France, leading to becoming associate finance director. He subsequently held a variety of senior positions within the company including category manager and marketing director France, vice president and general manager Iberia, vice president and managing director UK, and president Global Fabric Care. He was appointed group president Europe and officer of the Procter & Gamble Company in 2001. Prior to joining Unilever, Polman was chief financial officer at Nestlé S.A. from January 2006 and executive vice president and zone director for the Americas from February 2008.

Polman serves as president of the Kilimanjaro Blind Trust and patron of the Leaders for Nature, an International Union for Conservation of Nature (IUCN) initiative. Recognized by Investor Magazine as chief financial officer of the Year 2007, Polman received the Carl Lindner award from the University of Cincinnati in 2006 and was the WSI/CNBC European Business Leader of the Year 2003. He was awarded an honorary degree of Doctor of Civil Law from the University of Northumbria at Newcastle, UK in 2000.

■ Max von Zedtwitz, Professor, Tongji University, China.

Max von Zedtwitz is currently a professor of Strategy and Innovation at Tongji University in Shanghai, Director of the Research Center for Global R&D Management (GLORAD), and Managing Director of AsiaCompete InTl Ltd., China. Previously, he was a vice president with PRTM Management Consultants, and a professor at Beijing and Tsinghua Universities. He had been a professor at IMD in Lausanne until 2003. Von Zedtwitz has Ph.D. and MBA degrees from the University of St. Gallen, and a MSc from ETH Zurich. Von Zedtwitz has published widely in academic and practitioner journals, and in 2009 was recognized by the International Association for the Management of Technology as one of the fifty most influential innovation scholars worldwide. He is a frequent public speaker on innovation and China, has appeared on radio and television, and has been cited in periodicals such as The Economist, The New York Times, Der Spiegel, and NZZ. In consulting, von Zedtwitz helps multinationals with global R&D strategy and operations, R&D footprint expansion, and China innovation.

■ Jeffrey Hollender, Executive Chairman, Seventh Generation, Inc., USA.

Jeffrey Hollender is a well-respected leader in the socially and environmentally responsible communities. An entrepreneur at heart, his first business ventures were rooted in adult education. He began the not-for-profit organizations Skills Exchange of Toronto, a learning exchange that offered practical and professional development classes, and Network for Learning, New York City, an adult education and audio-publishing company; both were social and financial successes. After his tenure as president of Warner Audio Publishing, New York City, Hollender acquired a small mail order catalog of energy conservation products, Renew America, which eventually blossomed into Seventh Generation.

Hollender has led Seventh Generation from its humble beginnings to its current position as the leading and fastest-growing brand of natural products for the home, and the leading authority on sustainability. His blog, Inspired Protagonist, is a closely-followed resource and guide for spotlighting socially responsible business practices and principles on the global stage. Hollender is the author of several books, including What Matters Most and Naturally Clean. He is a member and former Director of the Social Venture Network, a group of socially-conscious business executives. He co-founded and was a Director of Community Capital Bank, a New York financial institution that invests in affordable housing and community development. He was also an Advisor to The Council on Economic Priorities’ best-selling guide book, Shopping for a Better World. Hollender served as president of The Rainforest Foundation USA from 1992 to 1996, an organization created to protect the rainforest and the human rights of its indigenous peoples. He also served as a board member and chairperson of the board of directors of Vermont Businesses for Social Responsibility.

Hollender currently serves on the boards of directors of the Greenpeace Fund; the Environmental Health Fund; Verite; the advisory board of Healthy Child Healthy World; and is a member of the Resource Education Foundation of Vermont Businesses for Social Responsibility. He is also on the board of Alloy Inc., a publicly traded company.

■ Richard Seymour, Co-Founder and Director, Seymourpowell, United Kingdom.

Dr. Richard Seymour is co-founder of internationally renowned design and innovation company Seymourpowell.

As one of Britain’s best-known and most accomplished designers, Dr. Richard Seymour has a career spanning more than 30 years and a huge range of creative disciplines. In this time he has become a global champion for design, picking up numerous awards along the way, including the D&AD President’s Award for Outstanding Contribution to Design.

Initially trained as a graphic designer and illustrator, Richard moved through advertising and film production design before launching Seymourpowell with Dick Powell in 1984. Richard is now also consultant global creative director of design to Unilever’s Dove, Axe (Lynx), and Vaseline brands, a trustee of the Design Museum in London and a past president of D&AD.

Founded in 1984, Seymourpowell has produced some of the ‘milestone’ products of the last two decades. The company’s design innovation work ranges from consumer appliances, electronics and mobile phones, to transportation including cars, motorcycles, trains and planes. The company has risen to a commanding position on the international stage, with clients as diverse as Unilever, Panasonic, Tefal, LG, Nestle and Diageo. Recent highlights include concept design work for the Virgin Galactic space-
craft as well as a concept design for Samsung Construction and Trading, called Aircruise – a giant, vertical airship powered by natural energy and designed to carry travellers in style and luxury. Other specialties include ethnographic user research, strategy and new product development (NPD), trends and forecasting, product design and development, and 3D structural design and 2D graphic design.

With his business partner Dick Powell, Richard has featured in a number of TV programmes for Channel 4 (Equinox, Designs on Your..., and Better by Design) that followed the development of new products, from the genesis of new ideas through to making them happen. They brought fresh thinking to kitchen bins, razors, burglar alarms, the economy airline seat and the all-important shopping trolley. Most famously perhaps was the design of a bra for the bigger bust, and an innovative toilet.

When he isn’t designing them, Richard enjoys riding motorcycles. He’s also a cellist and a keen supporter of Early English Music.

Richard holds an Honorary Doctorate from the College for Creative Studies in Detroit, an Honorary Masters from the Surrey Institute and is also a senior fellow of the Royal College of Art.

Day 2—Innovations in the Value Chain

**Manfred Trautmann, Vice President and General Manager BU Detergents and Intermediates, Clariant International, Switzerland.**

Manfred Trautmann was born in 1949 and is a German national based in Muttenz/Switzerland. He graduated from University of Darmstadt as a Chemical Engineer. Trautmann served as Project Engineer in the Hoechst Engineering Department (1976–1979) and Application Manager for Detergents and Personal Care in R&D, Hoechst AG (1979–1986). From 1986 to 1996, he held positions as Product Manager, National Accounts Manager and Marketing Manager for the Detergents and Personal Care Business of American Hoechst/Hoechst Celanese, North America; based in Charlotte, NC. From 1996 to 2000, Trautmann held Global Marketing & Sales positions for the Detergents, Personal Care and Plant Protection Additives Business of the Surfactants/FUN Division during the transition of Hoechst to Clariant. He was Head of New Business Development of the Business Unit Detergents from 2000 to 2007. From August 2007 to February 2009, he held the position of global Head of Marketing & Sales of the RBU Detergents & Intermediates. Trautmann was appointed to his current position in February 2009.

Manfred Trautmann has been an 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. In addition to serving on the Executive Committee for the 7th World Conference on Detergents in 2010, he has been a member of the Organization Committee for the last two events.

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

Kasper Rorsted was born in Aarhus, Denmark in 1962. He attended the International Business School, Copenhagen, Denmark and Harvard Business School, USA. Prior to 1995, he held management positions in marketing and distribution with Oracle and with Digital Equipment Corporation. Following that, he held various management positions at Compaq including head of Compaq Enterprise Business Group in Europe, Middle East, and Africa (EMEA), where in 2001 he became Vice President and General Manager. From 2002 to 2004 he was Senior Vice President and General Manager of Hewlett Packard, EMEA Region.

In 2005, he joined Henkel as Executive Vice President, Human Resources, Purchasing, Information Technologies and Infrastructure Services. In 2007, he was promoted to Vice Chairman of the Management Board of Henkel KGaA and Executive Vice President Human Resources and Infrastructure Services. Since April of 2008, Rorsted has served as CEO of Henkel AG & Co. KGaA.

Rorsted serves on the following Boards: Cable & Wireless, Great Britain, Danfoss A/S, Denmark, and Henkel Norden AB, Sweden.

**Michael Heinz, General Manager/Global Integration Manager Ciba, BASF SE, Germany.**

Michael Heinz holds a degree in business administration from the College of Applied Sciences, Ludwigshafen, Germany and an MBA in international business, Duke University, North Carolina, USA.

Heinz joined the marketing team of the Fine Chemicals division of BASF AG in 1987. Two years later, he transferred to New Jersey, USA, to become a product manager in Fine Chemicals and then remained in the US, after becoming a business manager for the Consumer Products and Life Science Division in 1995. In 1996, he took up a general management post in Quito, Ecuador. A year later he returned to the US to become Director of Marketing/Crop Protection in North Carolina. In 1999, Heinz became the President and General Manager of BASF de México SA, and BASF Central America and the Caribbean, based in Mexico City. Three years later, he was promoted to Group Vice President, Global Strategic Marketing for the Agricultural Products division, a role initially based in New Jersey, then from 2004, based in Limburgerhof, Germany.

In 2005, he became the President of BASF Agricultural Products division (renamed ‘Crop Protection’ division in 2008), based in Ludwigshafen. In February 2009, he took over responsibility for the integration of Ciba into BASF, and is currently based in Basel, Switzerland. In April 2009, Heinz was appointed Chief Executive Officer of Ciba.

**Martin Butler, Retail Author and Lecturer, United Kingdom.**

Martin Butler has worked in many top international advertising agencies including the Grey and Saatchi networks during a 30-year career. He recently sold his own UK advertising and marketing agency where he gained a reputation as a retail specialist. Born into retailing, Martin Butler is a true hybrid: part retailer, part marketer. He uses this unique combination to inform his thinking and shares his views in articles and editorials, regularly speaking at retail conferences and summits. In 2005 Butler wrote the internationally acclaimed book on best practice retail branding ‘People don’t buy what you sell, they buy what you stand for’.

Sponsored by the World Retail Congress, he is currently writing a new book benchmarking and celebrating worldwide retail best practice by interviewing 100 of the world’s leading retail CEOs this new book is due to be launched in Summer 2010 and involves research from every continent. Butler is also a member of the expert judging panel for the Congress and becoming a regular speaker at the prestigious Henley Business School. Each year he is invited to run the retail marketing module at the Oxford University Summer School on behalf of the British Shops and Stores Association.

**Masaki Tsumadori, Research Fellow, Global R&D, Kao Corporation, Japan.**

Masaki Tsumadori earned a Master Degree in Polymer Chemistry from the Nagoya Institute of Technology in 1977. Tsumadori began his career at Kao Corporation in 1977 as research chemist for developing fabric and home care products in Japan and Asian countries, including the Attack brand. He was appointed vice president, global R&D, fabric and home care of Kao Corporation in 2002.

Since 2008, Tsumadori has acted as Research Fellow for Kao Corporation as a member of R&D corporate staff. He has recently participated in the following committees and associations: S&D Division, American Oil Chemists’ Society; Technical Committee, Japan Soap and Detergent Association; International Committee, Japan Oil Chemists’ Society; and Director of the Japan Research Association for Textile End-Uses.
Day 2

Biographies

Hiroimatsu Takaoka, Director, Fabric-Care Research Laboratories, Lion Corporation, Japan.

Hiroimatsu Takaoka joined the Department of Research and Development at Lion Corporation in 1988. From 2006-2007, he was in charge of product development for Asian markets and was Director of Product Development Department at International Division. He is a Technical member of Japan Soap & Detergent Association and Detergent Committee Member of Japan Oil Chemist’s Society.

Emile H. Ishida, Professor of the Study on Environmentally Friendly Materials, Graduate School of Environmental Studies, Eco-material Design & Process Engineering, Tohoku University, Japan.

E.H. Ishida has been in his current position since September of 2004. He is a past director and COT, and was the chairman of both Environmental Strategy and Technological Strategy in INAX Corporation, and is a Fellow of the American Ceramic Society. Ishida holds a doctor of engineering in material science from Nagoya Institute of Technology, Japan. He has done research on the production system of minimizing materials and energy since 1985, and has advocated the closed manufacturing system. In 1997, Ishida proposed a consideration of the manufacturing process for human beings and the earth. Since 2004, he has advocated nature technology, which channels the forces of nature, and has expanded his activity internationally to the shift of a new paradigm.

His work has produced 90 patents and more than 250 scientific papers, and he is an author of 18 books. He has received fifteen society awards from the American Ceramic Society, the Mineralogical Society of Japan, the Ceramic Society of Japan, and others.

Erwin Annys, Director REACH/Chemical Policy, CEFIC, Belgium.

Erwin Annys obtained a Ph.d. in chemistry from the University of Ghent, where his studies concentrated on nitrosamines in rubber. He worked for sixteen years in the chemical industry in different positions including production, technical services, research and development, and regulatory affairs.

In 2001 with the publication of the white book, Annys was confronted for the first time with the new chemical legislation on chemical substances, REACH. Since then he has followed this area very closely. This legislation brought him to the Belgian federation of the chemical industry and the life sciences, Essenscia, in 2004, where he was responsible for product and innovation policy.

Since 2008 Annys has worked for Cefic, the European Chemical Industry Council where he is director, REACH/ Chemicals policy. He is an observer in the Competent Authorities Meeting for REACH and Classification and Labelling, as well in different committees of ECHA.

Julian Ho, Assistant Managing Director, Singapore Economic Development Board, Singapore.

Julian Ho is the assistant managing director of the Singapore Economic Development Board (EDB). He oversees EDB’s initiatives in the energy, chemicals and engineering services, biomedical sciences, logistics, professional services, and consumer business sectors. He also oversees the investment promotion efforts carried out by EDB’s 5 offices located in Europe. Prior to this, Ho held several director-level appointments leading various EDB divisions including the Energy, Chemicals and Engineering Services Cluster, Europe Operations, and Eastern US and North America Operations from 1998 to 2009. As executive director of the Energy, Chemicals and Engineering Services Cluster, Ho was responsible for leading EDB’s efforts to develop the oil and gas and chemicals sectors, the largest manufacturing cluster for Singapore. Ho also oversaw the growth of the engineering services cluster in Singapore to become a key provider of solutions to meet key engineering challenges for Singapore and the region.

Ho is a Glaxo-EDB scholar who graduated from Brown University with a BSc. engineering, biomedical, and a BA in economics, finance.

Koichi Nakamura, Principal Researcher, Global R&D—Fabric & Home Care, Kao Corporation, representing the JSDA, Japan.

Koichi Nakamura was born in Wakayama City, Japan in 1952, graduated from Kyoto University in synthetic chemistry in 1976, and received his doctorate from Kyoto University March 1981, and began working for KAO Corporation developing functional materials for personal care products. From October 1984 to September 1985 he was a postdoctoral fellow at Ohio State University, USA, and in March of 1985 became the group leader of the Polymer Development Division where he was the developer of optical disk, organic photoconductor, heat-sensitive papers, personal care related polymers, polymers for nose-pack, hair sprays, and for water-based nail enamel. In March of 1991, he became the group leader of Cosmetic Labs, working on development of make-up cosmetics and fundamental research on the structure and properties of lipstick. Nakamura became the manager of Organic Chemistry Laboratory in 1995 and was involved in the development of bioactive agents for cosmetics. In 1996, he became vice director of Goldwell GmbH & Co (now KPSS GmbH) in Germany. In March of 1999 he became the manager of Hair Care Labs where he researched hair science.

In March 2006, he became a principal researcher of R&D, Research Management Division, Global R&D Strategy, then in 2008 went on to become the principal researcher of Household Research Labs, doing fundamental household-related research. Nakamura became a member of the Japan Soap and Detergent Association in 2009 and started to work as a member of the Detergent committee of JSDA.

Day 3—Smarter Ways of Doing Things

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

Thomas Müller-Kirschbaum studied Physics, Chemistry, Technical Chemistry, Environmental Technology and Law of Air and Outer Space at the Universities of Cologne and Aachen in the late 1980s. He received his Ph.D. at the University of Cologne.

From 1989 until recently, Müller-Kirschbaum held various leading management positions with Henkel AG & Co KGaA in Research & Development in Germany and Spain. As of 2005, he serves as Corporate Senior Vice President of R&D and Supply Chain for the Laundry and Home Care Business. In addition to his work at Henkel, Müller-Kirschbaum is a board member of the European Soap and Detergents Association (AISE) and the Research Committee (FCI) of the Association of German Chemical Industry (VCI). He is also a member of the NanoCommission of the German Government and the Editorial Board of Journal of Surfactants and Detergents, as well as Chairman of the Committee of the Fraunhofer-Institute for Applied Polymer Research, Golm. At the University of Applied Science, Krefeld, he holds the title of Honorary Professor for Innovation Management.

Randy Quinn, Executive Vice President Laundry, Unilever, United Kingdom.

Randy Quinn received his bachelor’s degree in Economics from Stanford University and his M.B.A. from the University of California, Berkeley.

Randy worked at Procter & Gamble for about 15 years and The Dial Corporation. He joined Unilever in 1995, working in multiple regions and positions, including SVP of Marketing Operations, SVP of Fabric Conditioning and Household Cleaners, SVP of Brand Development for Home and Personal Care in North America, and Vice President and General Manager of our Global skincare business.

Randy is Unilever’s Executive Vice President for the Global Laundry Category, which is a 60 bn business that covers Fabric Cleaning and Fabric Conditioning brands including OMO, Persil, Surf, Comfort, Snuggle and Rin.
Kathy Fish joined P&G in 1979 with a BS degree in Chemical Engineering from Michigan State University. Her experience in the Fabric Care business includes her first four years in the company in what was then the Canada & Asia organization, from 1999-2002 in Global Fabric Enhancers, and, starting January 2009, as Vice President of Fabric Care. She had a range of assignments in Hair Care from 1983 until 1999, the last being Director of North America and Global Shampoo/Styling Platforms.

In 2002, Fish moved to Bath Care, where she led Upstream Technology and Programs before becoming R&D Manager in late 2003. She is currently the R&D sponsor for the Top Technical Talent Team, the Innovation Productivity Community of Practice, and the Front End of Innovation System, and is a strong believer in the importance of all three in driving the quality and efficiency of P&G’s innovation program. She values consumer-driven innovation, focus (critical issues, fewer/bigger initiatives/programs), multi-function collaboration, and long-term planning (destination projects) supported by short-term action that drives toward the long-term plan.

Per Falholt, Executive Vice President and CSO, Novozymes A/S, Denmark.

Per Falholt is the Executive Vice President and CSO for Research & Development at Novozymes A/S. Per Falholt joined Novo A/S in 1984 as a research chemist in the Enzyme R&D pilot plant. He subsequently held a number of managerial positions within development of new products for the detergent industry, until he joined the newly formed Enzyme Development & Applications division in 1995 as Director for Application Technology. In 1997, he moved to Raleigh, NC, USA to take responsibility for the American application technology unit.

In 1999, Falholt was called back to Denmark to take over the position of Corporate Vice President with responsibility for Enzyme Development & Application and in May 2000 he was appointed Corporate Vice President of the newly formed Enzyme Business R&D. In connection with the demerger of Novozymes from Novo Nordisk, he was given the title of Executive Vice President for R&D.

Prior to joining Novo Nordisk, Falholt worked at the Technical University of Denmark (DTU), where he took his MSc in chemical engineering in 1983. He feels a deep commitment to education within chemistry and biotech, and his eye for talent earned him an honorary professor title at The Institute for Systems Biology at DTU in June 2010. Falholt is currently Board Member for the IT company Asseco Denmark (since 2000), Chairman for the Young Scientists Association in Denmark, and serves as external lecturer at IMD, Lausanne, for the Executive MBA program.

Hans-Willi Schroiff, Corporate Vice President, Global Market Research, Henkel AG & Co. KGaA, Germany.

Hans-Willi Schroiff has a master’s degree and a Ph.D. in psychology, both from RWTH Aachen where he also worked as an assistant professor of psychology. In 1987 he joined Henkel and since then has worked in a variety of market research functions. In 1998 he became responsible for all worldwide research activities of the company.

Schroiff is a professor of business administration at RWTH Aachen and a visiting professor at the European School of Management and Technology (ESMT) in Berlin. He regularly lectures at the London Business School in Executive Education programs. He is the author of numerous publications in Market Research and Marketing and a frequent speaker at international conferences.

Thomas J. Lange, Director, Modeling & Simulation, Corporate R&D, The Procter & Gamble Company, USA.

Thomas Lange received a BSChE from the University of Missouri in 1978. He joined Procter & Gamble in May of 1978 as a product technical engineer. Lange has spent his 32-plus year career modeling and simulating formulations, products and production systems from how aerodynamics affect the chemistry of roasting peanuts, to how baby sizes affect the probability of a urine leak in a diaper.

In 1994, Lange was recognized with a PRISM award (Professional Recognition of Individual Sustained Mastery) for Engineering Sciences—P&G’s highest technical recognition award for Engineering. Lange has held positions of increasing responsibility in reliability engineering, computer aided engineering, and computational chemistry.

On July 1, 2008, Lange was named Director, Modeling & Simulation Global Capability Organization, R&D. This role leads P&G’s Modeling & Simulation efforts ranging from Computational Chemistry & Biology, Consumer Modeling, Computer Aided Engineering (CAE), Process Reliability, and Supply Chain Analysis.
Mark McGregor, Leadership Center GmbH, Switzerland.

Mark McGregor is one of the most internationally renowned management trainers, coaches, and keynote-speakers. His primary topics are leadership, life balance, motivation, high performance, psychology of winning, teamwork, effective selling, communication, and coaching. The core of his philosophy is responsible self-management, aligned with clear values and a clear personal vision and mission.

McGregor was born in Canada and has lived in Switzerland since 1992. He has been a hockey player and successful coach/manager of various teams in Germany and Switzerland for many years. He has worked as team manager and later on in the marketing of “team Canada.” McGregor has studied business and management training in Canada and Australia.

Since 1989 Mark McGregor has been known for his active role as leader and coach in business seminars and keynote speeches. In Australia he has worked for the Success Motivation Institute, the largest management training center in the world. In Canada, Mark has been a top-trainer with Custom Learning Systems, the biggest leadership and customer service training center in the country, where he was twice selected as “Speaker of the Year” by the participants.

Since 1999, he has been ranked as one of the top speakers at the St. Gallen Business School and the St. Gallen Management Program, the two biggest training centers in Switzerland. In addition to this, he has been an in-house trainer and keynote speaker for various well-known companies and organizations including Bayer, Credit–Suisse, DHL, Emerson, Esso, Hewlett Packard, INTEL, Nokia, Pfizer, UBS, VOLVO, Würth or T.E.A.M. Marketing AG, the sports marketing agency for the Champions League.

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

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

John McIver received his B.A. Degree with a major in Chemistry from the University of North Carolina, Wilmington and 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 spent in the Corporate R&D organization, where he directed Technology research for broad use across the company. He held several management positions within Corporate R&D before moving into an assignment in 2000 to establish and manage P&G’s Corporate Biotechnology capability. Following this assignment he moved to the Household 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.

Andrew T. Hight, R&D Leader, Unilever R&D, United Kingdom.

Andrew Hight is the R&D Discover Category Leader for Laundry within Unilever, and is responsible for the Research & Discover programmes for Unilever’s Laundry business worldwide. He is based in Unilever R&D Port Sunlight. He has worked in R&D for Unilever for over 30 years, primarily in the Laundry and Household Care businesses. Past roles have included Global R&D Director for Household Care, Technology Innovation Director for Laundry in Europe, and Development Manager for Laundry applications in Developing and Emerging Markets. Andrew has an MA from Oxford University in Chemistry, graduating in 1979.

Hans Juergen Scholz, Director, Application Development, BU Detergents & Intermediates, Clariant Produkte (Deutschland) GmbH, Germany.

Hans Juergen Scholz, a German citizen, was born in 1958. He studied Chemistry at the University of Würzburg and holds a PhD in Inorganic Chemistry from University of Würzburg. In 1986 he joined the Research Department of Geschäftsbereich Surfactants and Auxiliaries (Tenside und Hilfsmittel, TH), Hoechst AG, Werk Gendorf in Burgkirchen. In 1991, he moved to Frankfurt and joined the Application Department BU I of SBU TH, Hoechst AG. From 1995 to 1999, Scholz held a position as Key Account Manager in Global Marketing BU I of SBU TH, Hoechst AG, as of 1997 within the Division Functional Chemicals of Clariant. From 2000 to 2007 he took over a Manager position in New Business Development, Detergents Business of the Division Functional Chemicals, being responsible for Intellectual Property and Project Management.

Since 2008, Scholz has acted as Head of Application Development within Clariant’s Business Unit Detergents & Intermediates. His current title is Director Application Development BU Detergents & Intermediates. Besides his work at BU Detergents & Intermediates, he is also a member of the Scientific Advisory Committee of SEPAWA (Association of the Detergent and Cleaning Products Industry, and the Field of Cosmetics, Perfumery, and Formulators).
Montreux 2010 Exhibition

The two-day exhibition of supplies and services available to the fabric and home care industries is an integral part of the conferences and features 50 exhibiting companies. The exhibition hall is the networking hub of the World Conference with refreshment breaks, receptions, and open areas for conversation. Complimentary wireless internet access is also available in the exhibition hall.

**Exhibition Hours**

Tuesday, 5 October 2010
10.00–18.15
17.15–18.15 Exhibition Reception

Wednesday, 6 October 2010
10.00–18.00
17.00–18.00 Exhibition Reception

**The Cyber Café**

Powered by the AOCS Foundation
- Email Stations
- AOCS Press Bookstore
- Palace Bistro serving light fare and beverages

Tuesday, 5 October 2010
7.30–18.15 Cyber Café
10.00–14.00 Palace Bistro

Wednesday, 6 October 2010
8.00–18.00 Cyber Café
10.00–14.00 Palace Bistro

**A. R. Sulphonates Pvt. Ltd.**
Stand(s): 412
21 Prinsep Street
Kolkata, West Bengal, 700072, India
www.foglagroup.com
A.R. Sulphonates Pvt. Ltd. is a 100% EOU, ISO 9001:2008 Certified Company, a Government recognized Star Export House, manufacturer and exporter of LABSA (Linear Alkyl Benzene Sulphuric Acid), supplying to almost 50 countries worldwide for application in detergent powder, bars, liquids, creams and other detergent based applications. A.R. Sulphonates is the largest exporter of LABSA from India. Based in Mumbai, India with excellent transit time to the Middle East, Africa, America and S.E. Asia.

**AkzoNobel Surface Chemistry AB**
Stand(s): 323
SE-444 85 Stenungsund, Sweden
www.akzonobel.com/sc
AkzoNobel is proud to be one of the world’s leading industrial companies. Based in Amsterdam, the Netherlands, we make and supply a wide range of paints, coatings and specialty chemicals—2009 revenue totaled €13.0 billion. In fact, we are the largest global paints and coatings company. As a major producer of specialty chemicals we supply industries worldwide with quality ingredients for life’s essentials. We think about the future, but act in the present. We’re passionate about introducing new ideas and developing sustainable answers for our customers. That’s why our 54,000 employees—who are based in more than 80 countries—are committed to excellence and delivering Tomorrow’s Answers Today™.

**Exhibition Hall Floor Plan**
AMCOL Detergent Specialties
Stand(s): 202
Weaver Valley Rd.
Winsford Cheshire, CW7 3BU, UK
www.amcoldetergents.com

AMCOL is the global leader in bentonite production with facilities on every continent. In addition to softening bentonites and aesthetics, AMCOL manufacture multi-component functional granules, for use in detergents and other cleaning applications. AMCOL is pleased to introduce Questlock, a phosphorous free, soluble builder for use in fabric and auto dish formulations, and Quest PWA, a unique granule delivering fabric whitening. AMCOL Detergent Specialties is a subsidiary of AMCOL International Corporation.

Binacchi & Co. Srl
Stand(s): 301
Via Gramsci 84
Gazzada Schianno 21045, Italy
www.binacchi.com

Binacchi was founded in 1969 and has established its position as a world leader for know-how, quality of products and innovation in the production of soap and glycerine. Binacchi is the only company able to supply the full scope of process plants, finishing and packaging machines for that industry. Commercial alliance with Chemithon Corp. and IIT Srl has further boosted the activity of Binacchi in the detergent field. Binacchi is today a well consolidated supplier of detergent powder plants using either spray drying or agglomeration technology.

BUSS ChemTech AG
Stand(s): 321
Hohenrainstr. 12a
Pratteln 1, CH-4133, Switzerland
www.buss-ct.com

BUSS ChemTech is recognized by major manufacturers as the world leader in supplying alkoxylations technologies. Its extensive experience with commercial plants, combined with their own pilot plant facilities, allows building manufacturing units for alkoxylates with excellent product quality on the highest safety level and growth ratios up to 1:85.

C.M. Bernardini Srl
Stand(s): 329
Via Appia km 55900
04012 Cisterna di Latina LT, Italy
www.cmbernardini.it

C.M. Bernardini is an international engineering company specializing in the design and manufacture of plants and equipment for edible oils and oleochemicals as well as plants for biodiesel in a location near Rome (50 Km). Its manufacturing facilities extend over an area of 30000 sq. m. C.M. BERNARDINI has developed into one of the foremost international operators in the field of vegetable oil and oleochemical technologies especially for Glycerine Refining coming from spentlye, sweetwater, and biodiesel.

Center For Testmaterials BV
Stand(s): 108/207
Stoomloggerweg 11
3133 KT, Vlaardingen, The Netherlands
www.cftbv.nl

Center For Testmaterials is the one-stop-shop for all your needed testmaterials for detergent performance testing. All of the testmaterials sold in the industry are available through CFT. Next to the widest range of soiled testfabrics, we also offer (AISE) dyed fabrics and Standardized testmaterials for dishwash testing and hardsurface cleaning. Please visit our booth at 108 & 207 to see the latest developments!

The Chemithon Corporation
Stand(s): 303/305
5430 W. Marginal Way SW.
Seattle, Washington 98106-1598, USA
www.chemithon.com

Established in 1954, Chemithon is an oleochemical and surfactant technology and manufacturing company that supplies chemical process equipment and services to the detergent, specialty chemical, EOR and power industries. The company offers sulfonation, powder production, liquid blending, offsites, fractionation, hydrogenation, ethoxylation and technical services. Chemithon developed the first continuous sulfonation process. Partners include Chemithon International Pte. Ltd., Singapore; Chemithon Engineers Pvt. Ltd., Mumbai; IIT Srl, Italy; Binacchi & Co., Italy; Mitsui Plant Systems, Tokyo.

The Council for LAB/LAS Environmental Research (CLER)/The European Council on Studies on LAB and LAS (ECOSOL)
Stand(s): 406
CLER, 529 14th Street NW, Suite 750,
Washington, DC 20045, USA
www.cler.org
ECOSOL, Avenue E. van Nieuwenhuyse, B - 1160 Brussels, Belgium
www.lasinfo.org
CLER and ECOSOL are comprised of scientists and technical specialists from the Americas and Europe, representing manufacturers of linear alkylbenzene (LAB) and linear alkylbenzene sulfonate (LAS), the environmentally-proven laundry surfactant. Our mission is to conduct research on the safety of LAB/LAS and provide that data to regulators and the public.

Cognis Deutschland GmbH & Co. AG
Stand(s): 310/312
D-40789 Monheim, Germany
www.cognis.com
Cognis is a worldwide supplier of specialty chemicals and nutritional ingredients focusing on the areas of wellness and sustainability. The company employs about 5,500 people, and it operates production sites and service centers in 50 countries. Cognis has dedicated its activities to a high level of sustainability and provides value adding solutions and products based on renewable raw materials. The company serves the food, nutrition and healthcare markets, and the cosmetics, detergents and cleaners industries. Another main focus is on products for a number of other industries, such as coatings, inks, and lubricants, as well as agriculture and mining.

Copley Scientific AG
Stand(s): 325
Erlenstrasse 27
4106 Therwil, Switzerland
www.copleyscientific.com
Copley Scientific Limited is a leading manufacturer of laboratory test equipment for the chemical, pharmaceutical and associated industries, especially for test labs, quality-control labs, R&D labs, etc. We offer Detergent Testing Equipment, such as Tergometers, Hardness Tester for Dishwasher-Tabs, Powder-Flowability Tester, etc.
ISP technology empowers your products to deliver a host of exciting benefits.
With a broad portfolio of detergent and fabric care additives, ISP is the first name to consider when enhancing your product formulation. We offer cutting-edge technology, cost-effective solutions for difficult cleaning challenges and versatile ingredients compatible with an array of formulations.

- Sorez® HS 205 for superior oil release and repellency for hard surfaces
- Nuosept® BT20 for stable and formaldehyde- and VOC-free preservation
- Gantrez® S95 for enhancing performance of non-phosphate products
- ISP Microcapsules™ for unique delivery of fragrances in the wash
- Plus our Jaypol™ line of detergent additives to boost performance

When it comes to elevating detergency power, look to ISP for all your needs.

To learn more about how your products can benefit from our technologies and services, visit Booth 304 at Montreux 2010 or our redesigned site at www.ispcleaning.com.
Croda Home Care
Stand(s): 328
Cowick Hall, Snaith Goole
E. Yorkshire, DN14 9AA, UK
www.croda.com/europe/homecare

Visit Croda to discover a Natural World of Home Care. New product launches this year include Cirrasol ST Ultra, an innovative laundry care additive that makes softening through the wash easier than ever. With products based largely on natural and renewable resources, it is easier for our customers to go green with more environmentally responsible consumer products.

Desmet Ballestra SpA
Stand(s): 212/309/311
Via Piero Portaluppi, 17
20138 Milano, Italy
www.ballestra.com

Desmet Ballestra SpA is the world leader in the design and supply of plants for 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 1,600 plants in over 120 countries since it was founded in 1960.

EMPA Testmaterialien AG
Stand(s): 206
Mövenstrasse 12
9015 St. Gallen, Switzerland
www.empa-testmaterials.ch

EMPA Testmaterialien AG develops, produces, and sells test materials for the textile/leather and cleaning industry: wash performance of detergents, washing machines, and other soiled test cloths; dye transfer monitors; color fastness determination; unsoiled test cloth; standard detergents; standard loads; standard materials for leather; scales for color determination. EMPA Testmaterialien AG also has a high competence in Hygiene and Laundry: performance of different tests in the field of microbiology/laundry hygiene; testing of disinfectants according to international standards (e.g. DGHM – DIN/EN); surface hygiene.

Firmenich
Stand(s): 402/404
Route Des Jeunes 1, P.O. Box 259
Geneva 8 CH-1211, Switzerland
www.firmenich.com

Firmenich—A Passion for Smell and Taste. Firmenich is the largest privately-owned company in the perfume and flavor business. Swiss and family owned, we have created many of the world’s favorite perfumes for over 100 years and produced a number of the most well known flavors we enjoy each day.

Freeslate
Stand(s): 427/429
415 Oakmead Parkway
Sunnyvale, CA 94085, USA
www.freeslate.com

Freeslate provides products and related services for high throughput research based on its proprietary laboratory automation technology and integrated software suite. Relying on an experienced team of scientists and engineers, Freeslate works closely with its customers to design, develop and implement automated solutions that transform their approach to critical R&D work processes, accelerating innovation.

Genencor®, a Danisco division
Stand(s): 118/217
P.O. Box 218
Leiden 2300AE, The Netherlands
www.genencor.com

Genencor®, a division of Danisco A/S, is a world leading enzyme supplier. The industries we serve range from biofuels and laundry detergents to animal nutrition and food. Genencor® is part of the large Danisco A/S global group, with a sales and distribution network that spans more than 40 countries. The division employs about 1500 people worldwide.

Hansa Group AG
Stand(s): 414
Wauheimerstr. 408
D-47055 Duisburg, Nordrhein-Westfalen, Germany
www.hansagroup.de

Hansa Group AG (sales in 2009: 198 million euro; 330 employees) and its subsidiaries showcase a comprehensive range of products and services: continuous sulfonation and detergent plants, as well as individual systems, equipment and services: continuous sulfonation plants, powder detergent plants, liquid detergent plants, multipurpose detergent specialties plants (for betaines, amides, sulfosuccinates), and a full range of engineering and technical services. IIT is an alliance partner with The Chemithon Corporation and with Binacchi & Co.

IIT Srl
Stand(s): 303/305
Via Alba 15
21052 Busto Arsizio (VA), 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, powder detergent plants, liquid detergent plants, multipurpose detergent specialties plants (for betaines, amides, sulfosuccinates), and a full range of engineering and technical services. IIT is an alliance partner with The Chemithon Corporation and with Binacchi & Co.

International Process Plants
Stand(s): 431
17A Marlen Drive
Hamilton, NJ 08691, USA
www.ippe.com

International Process Plants, a US corporation in business since 1976, is the largest worldwide buyer and seller of new and used process plants and equipment. We continually have over 70 complete plants and over 27,000 pieces of process equipment in inventory. Our customers include leaders in: Chemicals/Fine Chemicals, Petrochemicals, Agrochemicals/Fertilizers and Pharmaceuticals.
ISP Corp.
Stand(s): 304
1361 Alps Road
Wayne, NJ 07470, USA
www.ispcorp.com
ISP is a global leader in detergent additives, providing a wide array of performance-enhancing chemicals for many applications. Our globally proven chemistries include such popular lines as the Disintel family of disintegrants; Surfodene specialty surfactants; Chromabond dye transfer inhibitors; Integra biocides; Easy-Sperse, Gantrez, Antara, SOREZ and Pollectron copolymers; and Microflex micro-emulsions. Our recent addition of Acrylate chemistries allows ISP to supply highly effective dispersants for enhanced detergency and Rheology modifiers for liquid detergents and cleaners. This comprehensive portfolio makes ISP one of the most diverse and technologically superior suppliers to the household, industrial and institutional cleaning market.

Kemira Kemi AB
Stand(s): 408/410
P.O. Box 902,
251 09 Helsingborg, Sweden
www.kemira.com
Kemira is a global 2 billion euro chemicals company that is focused on serving customers in water-intensive industries. The company offers water quality and quantity management that improves customers’ energy, water, and raw material efficiency. Kemira’s vision is to be a leading water chemistry company. To the detergent industry, Kemira provides sodium percarbonate under the brand name ECOX from the production unit in Sweden. Also available is a variety of other Kemira chemicals: hydrogen peroxide, formic acid, FWA, polymers and biocides.

Kibron Inc. OY
Stand(s): 330
Upseerinkatu 3A
Espoo 2600, Finland
www.kibron.com
Laviosa Chimica Mineraria Spa
Stand(s): 405
Via Leonardo da Vinci, 21
57123 Livorno, Italy
www.laviosait
Laviosa Chimica Mineraria is a global supplier of bentonite-based products for several fields of application, including household and personal care. We produce and market worldwide granulated products for super-softening effect in powder softeners (two in one) formulations (range Detersoft®); mass-coloured speckles for aesthetic function (range Detercal® G Coloured); thickening, suspending and antiscellting agents (range Laviotix®) for rheological function in liquids and creams. Tailor-made products and intermediate bentonite compounds are also available.

Lion Corporation
Stand(s): 409/411
3-7 Honjo 1-chome
Sumida-ku, Tokyo 130-8644, Japan
www.lion.co.jp/en/
Lion Corporation, a leading Japanese household and personal care products manufacturer, is committed and dedicated to preserving the natural environment and reducing CO2 emissions with its environmentally responsive, yet highly effective, products and technologies. Our plant-based surfactants, methyl ester sulfonate (MES) and methyl ester ethoxylate (MEE), exert high detergency in a wide range of conditions, especially in hard water or at low dosage, when used in laundry detergents.

Mazzoni LB SpA
Stand(s): 212/309/311
Corso Sempione 212 bis
21052 Busto Arsizio, Italy
www.mazzonilb.it
Mazzoni LB is the world leader in soap and glycerine technologies—more than 2500 plants in operation with a market share superior to 50%. During 2010 an important investment plan has been completed with the introduction of new divisions: MLB Flowpack: wide range of wrappers for capacities up to 500 bph; Mazzoni Food: plants and machinery for chewing-gums and liqueurices; and Bertuzzi: a leading company in design and manufacture of process plants for fruit and vegetable juices.

MKS Devo Chemicals
Stand(s): 317
Bahcesehir 2.Kisim Mh. Ardicli Eyver Sitesi,
Yakut Villa 11 Basaksehir
Istanbul, Turkey
www.mksdevo.com
MKS Devo is a manufacturer and exporter of chemicals through six business divisions. Our chemicals include phosphonates, polymers, naphthalene sulphonate, industrial chemicals, textile technologies, and dyes.

Novozymes A/S
Stand(s): 316/318/415/417
Krogshoejvej 36
DK-2880 Bagsvaerd, 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
Stand(s): 205
33 Old Hanuman Lane, 1st Cross Lane,
2nd Floor, Kalmadevi Road
400 002 Mumbai, India
www.pmcindia.com
Paramount has been a major global producer of optical brighteners for more than two decades. It supplies the biggest multinational detergent, paper and textile companies globally. Our product range is comprehensive and covers all OBAs needed in the consuming industries. We offer stilbene and biphenyl based OBAs in spray-dried powder and liquid forms.
POMPE CUCCHI Srl
Stand(s): 319
Via dei Pioppi 39, 20090 Opera (MI), Italy
www.pompecucchi.it


Purac
Stand(s): 327
Arkelsedijk 46 P.O. Box 21
Gorinchem 4200 AA, The Netherlands
www.purac.com

Our core competence is our fermentation technology; the skill of using micro-organisms to transform carbohydrates into various acids—mainly lactic acid, a very versatile building block for various applications. The most important markets are preservation, fortification, detergents, green chemicals and bioplastics. We have a leading worldwide position in providing healthy, natural and eco-friendly products. Continued investments in research and development and close cooperation with our customers have provided us a strong, preferred position. The production of lactic acid is now efficiently concentrated in three large-scale factories on three continents; highly specialized lactic acid based derivatives are manufactured close to our research and development facilities.

SELA Maschinen GmbH
Stand(s): 306
Am Glüsig 3
D-39365 Harbke, Germany
www.sela-gmbh.com

Formerly Weber & Seeländer, SELA Maschinen GmbH produces individual machines and complete plants for the production of soap, such as laundry soaps, toilet soaps, translucent soaps, multicolored soaps, fancy soaps, detergent bars, and laboratory machines for soap and fragrance producers. SELA also manufactures plants for neutral fat saponification, fatty acid neutralization, vacuum drying, and special machines for the chemical industry.

Süd-Chemie AG
Stand(s): 315
Ostenrieder Str. 15
D-85368 Moosburg, Germany
www.sud-chemie.com

Süd-Chemie: Natural Softeners—A soft touch together with a nice smell for many consumers is as important as the cleanliness of the fabric. Süd-Chemie has been supplying bentonite softening aids for over 40 years to the industry. Our R&D efforts have led to a new generation of softening bentonites with significantly enhanced performance. Süd-Chemie also offers a range of additives and co-compounds for powder and liquid detergents ranging from colored granules for aesthetics to granules enhancing active ingredients for post-addition.

Temix International Srl
Stand(s): 210
Via Piero Portaluppi 17
20138 Milano, Italy
www.temixint.com

Temix International Srl is a marketing and sales organization focused on raw materials mainly from vegetable sources such as fatty alcohols and derivatives, and fatty acids, esters and propylene glycol from corn for the detergent, personal product and cosmetic industries. Having access to high quality raw materials, Temix is also a supplier of surfactants through both strategic supplier alliances and partnerships with local surfactant manufacturers. Based in Milan, Italy, Temix is particularly active in Europe, the Middle East, Africa, Russia and Latin America.

Thermphos
Stand(s): 403
Bundesplatz, 1
CH-6300 Zug, Switzerland
www.dequest.com; www.thermphos.com

Thermphos International is one of the world’s largest producers of phosphorus, phosphoric acid, phosphates, phosphonates and phosphorus derivatives. Customers around the world rely on our high-quality products for applications in a variety of markets such as personal care, pharmaceuticals, hygiene, industrial and household cleaning, food and feed additives, beverages, flame retardants, crop protection, etc. Thermphos offerings for detergent include phosphates, phosphates, polymers and bio-based polymers.

Warwick Chemicals
Stand(s): 204
Dock Road, Mostyn, Holywell
Flintshire, CH8 9HE, UK
www.warwickchem.com

Warwick Chemicals is the world’s leading manufacturer of bleach activators. From our manufacturing site in North Wales, we supply TAED to over 40 countries for use in laundry detergents, laundry additives and automatic dishwashing formulations. Our Research and Development team is ready to give formulation advice on bleach activator usage and is working on developing the next generation of products. Our subsidiary, Warwick Equest, supplies performance monitors to the detergent industry.
Dow Fabric & Surface Care helps bring a lighter environmental footprint to your household and institutional care brands. Explore our growing portfolio of naturally sourced, biodegradable ingredients that comply with regulatory certifications and eco-label requirements, and learn how our testing and scale-up capabilities can help you accelerate product development.

Is there an ideal formula for maximum performance?

The crew. The material. The technology. The forces of nature. Success demands that all these factors play together, whether in the specialty chemicals business or on the high seas. Chemistry is an exacting science: every action must be just right – on deck or up in the mast. At Clariant we know all about high technologies that improve the characteristics of materials, including sails and performance plastics. Clariant stands for colors, surfaces and performance chemicals geared to the needs of a broad range of sectors. What's more, we're close enough to provide a solution to your problem on the spot. Wherever in the world you are. Clariant International Ltd, www.clariant.com

What do you need?