SEPAWA®
detergents · cosmetics · fragrances

Annual Newsletter
2023

SEPAWA® Annual Newsletter 2023

Annual Newsletter to our Members

Dear Members,
Dear Colleagues,

The annual newsletter includes the following topics:

Imprint:
SEPAWA® – Vereinigung der Seifen-, Parfüm-, Kosmetik- und Waschmittelfachleute e. V.
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1. Annual General Meeting 2023 of SEPAWA® e.V.

The Annual General Meeting took place on October 24, 2023 at 16:30 h in the Estrel Congress Center Berlin. There were 43 persons present. A summary of the Annual General Meeting follows here.

1.1. Welcome

The meeting was warmly welcomed by the chairperson at the Estrel Hotel, Berlin. The invitation to the meeting was properly sent to all members on August 11, 2023, via email. Guests present are asked to leave the meeting.

1.2. Appointment of the Secretary

According to Article §18 of our statute, a secretary must be appointed at the beginning of the meeting. Franziska Konle is proposed as the secretary. Ms. Franziska Konle is unanimously elected as the secretary by a show of hands.

1.3. Board Report

The board reported on a successful year in 2022, building on pre-Covid-19 achievements. The 2022 congress was particularly successful with a high number of participants and positive feedback. The board implemented various improvement suggestions, including optimizing presentation rooms and improving signage. Additionally, it was decided to replace food and drink vouchers with a lump sum. The board is currently working on a new SEPAWA® website to enhance user-friendliness.

1.3.1. Board Activities

The board focused on feedback from participants and exhibitors for the congress in 2022, making necessary adjustments. Administrative changes were also made in 2023 to streamline processes and improve efficiency. Scientific works in the field of SEPAWA® e.V. were awarded for the promotion of young talents.

Award winners 2023:

- **1st Place Bachelor**
  Name: Carolin Goj (Henkel AG & Co KGaA)
  Influence of Cations on Interfacial, Rheological, and Applicational Properties of Surface Active Ionic Liquids
- **2nd Place Bachelor**
  Jacob-Nelson Zombou (Symrise AG)
  Optimization of the Water Solubility of Loadable Polymer Matrices
- **1st Place Master**
  Robin Benedix
  (Institute of Physical Chemistry – University of Stuttgart)
  CO_2-Switchable Additives and Aurfactants
- **2nd Place Master**
  Annika Greupner (Henkel AG & Co. KGaA)
  The Role of Enzymes in Natural Hair Colouration Exemplified by Hair Dyeing Mechanism of Henna Plant (*Lawsonia inermis L.*)
- **3rd Place Master**
  Kathrin Ludwig (Henkel AG & Co. KGaA)
  Method Development for Determining the Antioxidant Activity of Raw Materials with Potential Effects on Hair
- **1st Place Ph.D.**
  Dr. rer. nat. Albert Prause (Technical University of Berlin)
  Structural Investigation of Hydrophobically Modified Thermoresponsive Polymers and Their Influence on the Rheology of Microemulsions
- **2nd Place Ph.D.**
  Dr. rer. nat. Tamara Schad
  (Institute of Physical Chemistry, University of Stuttgart)
  Innovative Cleaning Concept for Art Objects and Cultural Assets

1.3.2. Keynote Lecture

This year's keynote speech was delivered by Dr. Theo Waigel on the topic "Politics and Economy in Unstable Times."

1.3.3. Activities of Specialist Groups and Sections

The conference sessions organized by various working groups and sections in 2023, as well as planned events for the upcoming year, were listed.

▲ *SEPAWA® CONGRESS 2023*

Lecture Events 2023:

- **Specialist Group Innovative Cleaning (IR)**
  January 18 – 19, 2023, Freising
- **Specialist Group Raw Materials & Processes (R&P)**
  February 3, 2023, Marl
- **German Society of Perfumers in SEPAWA® e.V. (DGP)**
  March 23 – 24, 2023, Bad Dürkheim
- **Specialist Group Cosmetic Applications and Technologies (CAT)**
  May 9 – 10, 2023, Würzburg
- **Specialist Group Professional Cleaning and Care (PRP)**
  May 22 – 23, 2023, Konstanz

Lecture Events 2024:

- **Specialist Group Innovative Cleaning (IR)**
  February 21 – 22, 2024, Düren
- **Section Austria**
  April 9 – 10, 2024, Anif (near Salzburg)
- **Specialist Group Legislative – Environment – Consumer (LUV)**
  April 22 – 23, 2024, Dessau
- **German Society of Perfumers in SEPAWA® e.V. (DGP)**
  April 25 – 26, 2024, Prague
- **Specialist Group Cosmetic Applications and Technologies (CAT)**
  May 15 – 16, 2024, Nuremberg
- **Specialist Group Professional Cleaning and Care (PRP)**
  June 3 – 4, 2024, Konstanz
- **Specialist Group Raw Materials & Processes (R&P)**
  September 13, 2024, Evonik in Essen
- **Section Switzerland**
  September 13, 2024, TBA

1.4. Treasurer's Report

The report on the financial and asset situation is presented by Treasurer Dr. Erik Brücker.

1.5. Financial Audit Report and Approval of the Audit

The financial audit conducted by Thilo Baum and Erich Kreuzwieser on October 10, 2023, in Thannhausen revealed no irregularities. The assembly approves the audit and grants the auditors discharge.

1.6. Acclamation Voting

The vote on acclamation voting is unanimous.

1.7. Discharge of the Auditors

The discharge of the audit is unanimous, with two abstentions.

1.8. Discharge of the Treasurer

The discharge of the treasurer is unanimous.

1.9. Overview of the SEPAWA® eVent GmbH in 2023

Dr. Erik Brückner provides an overview of eVent GmbH.

1.10. Election of the Election Commissioner

Mr. Thilo Baum has agreed to take on the role of election commissioner this year. Thilo Baum is unanimously elected as the election commissioner.

1.11. Discharge of the Board

Thilo Baum requests the discharge of the board. The board is unanimously discharged. The assembly thanks the board for its dedicated work over the past two years.

1.12. Nomination and Election of the New Board for the Next Two Years

The following individuals were nominated for various positions on the board. There were no other interested parties.

- Dr. Hans Jürgen Scholz is unanimously elected as chairman.
- Dr. Erik Brückner is unanimously elected as treasurer.
- Dr. Gerhard Merkle is unanimously elected as secretary.
- Michael Fender, Prof. Dr. Dr. Jürgen Lademann, Prof. Dr. André Laschewsky, and Holger Plate as additional board members or department heads are unanimously elected.

The newly elected board assumes its duties.

1.13. Election of the Auditors

Erich Kreuzwieser and Thilo Baum are unanimously elected as auditors for the coming year 2024.

1.14. Board Tasks and Outlook 2024

The board met four times in 2023 and had one Zoom meeting.

The board discussed various initiatives, including the establishment of the SEPAPack working group, plans for educational initiatives, and the launch of a SEPAWA® e.V. podcast to generate more interest in the industry.

One challenge is finding interesting lecture topics for conferences. Additionally, the SME working group joined the Raw Materials and Processes working group. The board offers increased support for organizing events. The rejuvenation of the board in the next two years was discussed.

1.15. Approval of the Budget

The proposed budget plan for the upcoming year was presented by Dr. Brückner and approved by those present.

The vote on the 2024 budget is unanimous through acclamation. The 2024 budget is unanimously approved without opposition or abstentions.

1.16. Other Matters

The meeting concluded with the invitation to submit further questions or suggestions.

As no further questions or suggestions were raised, the chairperson concluded the Annual General Meeting 2023 and wished all participants a successful participation in this year's SEPAWA congress.

Dr. Scholz closes the Annual General Meeting.

Berlin, October 24, 2023

Franziska Konle
(SEPAWA® e.V. Office)

2. Membership Figures 2023

Personal Members	
Germany	1009
Section Austria	95
Section Benelux	167
Section Switzerland	118
Nordic Section	58
Total personal members	1447

Corporative and Sustaining Members	
Sustaining Members	37
Corporative Members DE	78
Corporative Members CH	46
Corporative Members AT	36
Corporative Members Benelux	37
Total	234

In December 2023 our association consisted of:

Personal Members	1447
Corporative and Sustaining Members	234

SEPAWA® e.V. now counts a total of 1681 members.

3. Addresses

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Board

Chairman
Dr. Hans Jürgen Scholz

Treasurer
Dr. Erik Brückner

Secretary
Dr. Gerhard Merkle

Board Members
Michael Fender
Prof. Dr. Dr. Jürgen Lademann
Prof. Dr. André Laschewsky
Holger Plate

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Specialist Groups

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Cosmetic Applications and Technologies (CAT)
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Raw Materials and Processes (R&P)
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Innovative Cleaning (IR)
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4. Board Expresses its Gratitude

The SEPAWA® Board would like to thank all members for supporting our association during this year, and wish you a healthy, successful and happy 2024.

Yours, SEPAWA® e.V.

5. Press Release on the SEPAWA® CONGRESS 2023

The 70th SEPAWA® CONGRESS, the 19th European Detergents Conference and the Cosmetic Science Conference from October 25th to 27th, 2023 in Berlin

It's clear now: "Participation in the SEPAWA® CONGRESS is essential in our industries".

For the fifth year, the SEPAWA® CONGRESS was held at the ECC Estrel Congress Center in Berlin. It was the 70th SEPAWA® CONGRESS. This doesn't mean it's getting old. On the contrary, the SEPAWA® CONGRESS is vibrant and enjoys great popularity within our industry and beyond. Statistics clearly demonstrate this: 3516 participants from 65 countries, 318 exhibiting companies, 155 presentations, and 65 posters.

Allow a moment of nostalgia, as the "congress journey" once led from Bad Dürkheim via Würzburg and Fulda to Berlin. For instance, at the 57th SEPAWA® CONGRESS in 2010 in Fulda, around 1600 participants from 29 countries gathered. The exhibition counted 148 exhibitors, 28 presentations were held in the scientific conference, and 46 short presentations took place in the then-new "Forum for Innovation. The SEPAWA® e.V. board and the SEPAWA® eVent GmbH, as organizers, have once again succeeded in designing and smoothly executing an attractive congress. The congress venue is ideal, and visible expansions regarding on-site accommodation capacities are taking shape. The congress format, combining lectures and a trade exhibition, is coherent, and the distances between them are short. Research findings of industry-related scientific basic research were presented in up to five parallel sessions within the "European Detergents Conference" (EDC), scientific cosmetics results within the "Cosmetic Science Conference" (CSC) of the DGK e.V., as well as results of application-oriented research and development in detergents, cosmetics, and perfumery.

The session on regulatory topics and sustainability, founded by the SEPAWA® e.V. specialist group "Legislative – Environment – Consumer" and the main committee for detergents of the GDCh, is gaining importance. A session on "Sustainable Packaging" has now become established in the lecture program. Parallel to the lecture program, a poster session takes place on all three congress days.

SEPAWA® CONGRESS has a unique appeal of combining a trade show exhibition with a forum for discussion via conference, posters and many network opportunities under one roof. 318 companies showcased their innovations and many of them presented at the "Forum for Innovations".

Each year, a highlight is the honoring of exceptional achievements. Dr. Hans Jürgen Scholz, the 1st Chairman of SEPAWA® e.V., conferred the awards.

Awarding of the SEPAWA® e.V. Young Researchers' Award

The annual SEPAWA® e.V. Young Researchers' Award fulfills one of the most important objectives of SEPAWA® e.V., particularly to support the training of young professionals. The prize is awarded to students for outstanding bachelor's, master's, and doctoral theses.

From the submitted works, the jury selected seven winners. Specifically, two bachelor's, three master's, and two doctoral theses were evaluated as deserving of the prize.

▲ *Young Researchers' Award winners 2023*

The 1st prize in the category "Outstanding University Graduate with a Bachelor's Degree" was awarded to *Ms. Carolin Goj*, Hochschule Niederrhein, in cooperation with Henkel AG & Co KGaA, for her work on "Influence of Cations on the Interfacial, Rheological, and Application-Technical Properties of Surface-Active Ionic Liquids".

The 2nd prize went to *Mr. Jacob-Nelson Noudem Zombou*, Ostwestfalen-Lippe University of Applied Sciences, in collaboration with Symrise AG, for the work on "Optimization of Water Solubility of Loadable Polymer Matrices".

The 1st prize in the category "Outstanding Master's Thesis" was awarded this year to *Mr. Robin Benedix*, University of Stuttgart, for the work on "CO_2-Switchable Additives and Surfactants".

The 2nd prize was given to Ms. Annika Greupner, University of Hamburg & Henkel AG & Co. KGaA, for her work on "The Role of Enzymes in Natural Hair Colouration Exemplified by Hair Dyeing Mechanism of Henna Plant (*Lawsonia inermis L.*)".

The 3rd prize was awarded to *Ms. Kathrin Ludwig*, University of Hamburg & Henkel AG & Co. KGaA, for work on "Method Development for Determination the Antioxidant Activity of Raw Materials with Potential Effects on Hair".

The 1st prize in the category "Outstanding Doctoral Thesis" was awarded to *Dr. rer. nat. Albert Prause*, Technical University of Berlin, for the title: "Structural Investigation of Hydrophobically Modified Thermoresponsive Polymers and Their Influence on the Rheology of Microemulsions".

The 2nd prize went to *Dr. rer. nat. Tamara Schad*, University of Stuttgart, for her work on: "Innovative Cleaning Concept for Art Objects and Cultural Assets".

Awarding of the SEPAWA® e.V. Innovation Award

Innovations are crucial for growth and competitiveness in our markets and form the basis for successful and sustainable business. For the ninth time this year, the SEPAWA® e.V. Innovation Award was presented to three winners in the fields of cosmetics and detergents. The award aims to provide impulses for active idea management in the member companies of SEPAWA® e.V. and raise public awareness for successful innovations.

A neutral and independent jury, consisting of 7 members of the advisory board, the scientific advisory board, and the board of SEPAWA® e.V., selected 4 winners from 26 submissions. The prize consists of a certificate and a wooden trophy, stylized in the form of the SEPAWA® e.V. wave.

The first prize went to Worlée-Chemie GmbH for their work titled: "Product Innovation WorléeSuspens ECO: Sustainable Biopolymer for Environmentally Friendly Product Solutions".

The second prize was awarded to Seppic France for the work titled: "SAGACIOUS™ – The Biomimetic Anti-Sagging Ingredient".

A third prize was presented to Inolex GmbH with the title "Amino-Sensyl™ Ultra MB – Breakthrough Cationic Amino Lipid Technology for Sustainable Hair Care".

Another third prize was awarded to Symrise AG for the title: "Multifunctionals as Innovative Solutions for Formulating Modern Home Care Products".

The award ceremony took place at the beginning of the After Event. There's no more fitting moment than the award ceremony attended by around 950 guests, even if they have to wait a little longer.

▲ *SEPAWA® e.V. Innovation Award 2023: Winners of the first prize (Worlée-Chemie GmbH, top), and winners of the SOFW Award 2023 (bottom)*

Awarding of the SOFW Award

For the fourth time, measured against the 150-year history of the journal, a "young tradition", the "SOFW Award" was presented at the SEPAWA® CONGRESS for the three best articles in the SOFW Journal of the previous year.

Following the recommendations of a 9-member expert jury, three winners were selected and honored from 51 articles.

The first prize was awarded to the authors *A.J. Hoekstra, E. Care,* and *T.P. Graycar* of the company: IFF Health & Biosciences for the article on "Advancements in Enzyme Engineering Open Opportunities for More Sustainable Detergents".

The second prize was awarded to *S. Christian* and *V. Krug* from GloryActives GmbH. The article's topic is: "Protective Beauty – Comprehensive Skin Protection through Enzymes".

Authors *J. Heuer* and *P. Arbter* from COLIPI GmbH received the third prize for the publication on the topic "Sustainable Yeast Oil – How Fat is That?".

Awarding of the GDCh Division of Detergent Chemistry

Traditionally, the GDCh Division of Detergent Chemistry honors young scientists for excellent scientific work with particular relevance to the development of detergents and cleaning agents.

This year, the sponsorship award for an outstanding doctoral thesis was given to *Dr. Susanne Jacksch*, Institute of Precision Medicine, Furtwangen University, Villingen-Schwenningen, Germany. The title of the work is: "Investigations on the structure and function of the microbiota in household washing machines, kitchen sponges, and on laundered textiles". The work was sponsored by Justus Liebig University Giessen and Henkel AG & Co. KGaA.

Keynote Lecture

This year's keynote speech was delivered by *Dr. Theo Waigel* under the title: "Politics and Economy in Unsteady Times". A broad audience gathered in the auditorium, eagerly anticipating the insights of one of the most experienced figures in German politics on the aforementioned topic. He himself describes the facts, makes observations, and outlines the questions as follows:

"They are blind guides. If a blind man guides a blind man …" (Matthew 15:14). A world in transition! Inflation, war, power shifts, threatened democracy! What does history teach us? Has this all happened before? How were these challenges overcome? Can we learn from this? Do we need more sighted people? Quo vadis genus humanum? Should we be confident or fearful?

▲ *Dr. Susanne Jacksch received the Young Scientist Award of the GDCh Division of Detergent Chemistry for her outstanding dissertation*

The Lecture Event – a Compilation of Selected Focus Topics

The lecture event reflects both the scientific foundation and the breadth of technical applications of our detergent/cleansing, cosmetic, and perfume industries comprehensively.

Within the European Detergents Conference (EDC), founded by the "Division of Detergent Chemistry" specialist group of the Gesellschaft Deutscher Chemiker, 14 scientific presentations were held on the theme "Polymers in Water – Quo Vadis?". It delves into the future role of water-soluble polymers, focusing on issues such as self-organization, modern production methods, water treatment, use in existing and new application areas, and the general biodegradability of such materials.

The presentations were supplemented by theses on the awarded doctoral work by the laureate. The EDC presented 21 science-oriented posters.

During the Scientific Conference of SEPAWA® e.V., which covers the latest research results of our industries – detergent/cleansing, cosmetic, and perfume – and their regulatory framework, 64 presentations were delivered. The main topics in the "Personal Care Session" carried by the CAT specialist group included inflation and pricing, green chemistry and biotechnology, natural ingredients in formulations, and product-related carbon footprint. In the Home Care Session, the focus was on circular economy and plastic reuse, color protection for textiles, and modeling the stability of dispersed systems. The LUV specialist group is responsible for selecting the presentations, always focusing on the most current topics. For example, the selection included critical degradation products of aminopolyphosphonates in the environment, plastic and microplastic issues, the factual discussion on 1,4-dioxane by TEGEWA in light of upcoming legislative initiatives to limit it, and the aimed simplification of the European Detergents Regulation.

In addition, 46 posters were exhibited. This year, 88 speakers presented the latest in their developments in the "Forum for Innovation" and 19 posters with application-oriented content were displayed. The posters were represented on-site throughout the congress by the presenters, mainly by young scientists from universities and academic institutes, as well as by employees of industrial research and institutional facilities in our industries.

▼ *Dr. Theo Waigel (Keynote lecture, SEPAWA® CONGRESS 2023)*

The Cosmetic Science Conference of the DGK e.V.: “The Scientific Foundations of Cosmetics”

The aim of this conference is to present the development of cosmetic sciences through impressive background information. Modern formulation technologies using new ingredients are the focus. The CSC comprised a total of 19 presentations this year. The topics mirror the breadth of cosmetic science. New active ingredients are highlighted for their physiological effects; biotechnologically based processes and active substances are introduced, focusing on the energetic and temporal optimization of emulsion production, as well as the selection of suitable emulsifiers for cold production. Moreover, studies on the photostability of UV filters and their realistic efficacy are presented.

▲ *View into a conference room*

Sustainable Packaging

The topic of “Sustainable Packaging” is highly relevant and therefore a consistent part of the congress program. In 11 presentations of the session, participants were informed about the current regulations of packaging solutions, as well as their latest practical implementations. Topics included the reuse of packaging and associated challenges and risks, novel bioplastics, and aerosols.

After Event

Almost 950 guests enjoyed the wide selection of culinary delights and did not mind lining up at the buffet tables of the celebrity chefs. The ECC excelled with its gastronomic abilities, and the Estrel Live Band invited everyone to dance. One of the highlights of the after party were a special guest appearance by The Blues Brothers who got everyone on their feet to dance along! As usual, the party went on until well after midnight.

Conclusion, Thanks, and Outlook

The SEPAWA® CONGRESS hasn’t lost any of its attractiveness. On the contrary, the 70th SEPAWA® CONGRESS, actually a mini-jubilee in sequence, counted over 3500 attendees. A proud record. Familiar procedures, as well as innovations, have contributed to this success. Registration runs smoothly, and bidding farewell to the traditional coupon system for food and beverages is certainly a gain. It’s not only the ECC location that effortlessly accommodates congresses of this scale. It’s the participants who create a lively atmosphere and a great networking opportunity overall. Specifically, it’s the speakers with their presentations on various topics and the exhibiting companies that showcase the continuity, creativity, and innovation of our industry.

The board of SEPAWA® e.V. thanks everyone who contributed to the success of the congress, especially the team of SEPAWA® eVent GmbH, led by Robert and Siegfried Fischer, which prepared and conducted the congress with professionalism and enthusiasm.

Conclusion: “Value for money is right.” This makes the annual SEPAWA® CONGRESS the most significant meeting point for the detergent/cleansing, cosmetic, and perfume industries in Europe.

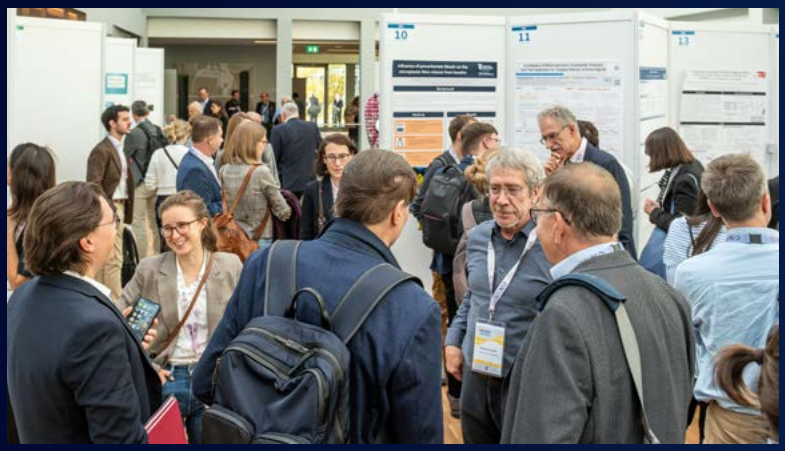
It’s never too early to mark your calendar! The SEPAWA® CONGRESS 2024 will take place from October 16th to 18th at the ECC in Berlin.

The congress report will soon be available on the SEPAWA® CONGRESS Website at www.sepawa-congress.com
(Footer menu: Page: Highlights)

Dr. H. Lothar Möhle

SEPAWA® CONGRESS 2023

Picture Gallery



6. Annual Reports of the Specialist Groups and Sections

6.1. SEPAWA® Specialist Group Professional Cleaning & Care (PRP)

On May 22nd and 23rd, 2023, stakeholders from the cleaning and hygiene industries gathered in Constance for the annual conference of the SEPAWA® Professional Cleaning & Care Specialist Group, entitled: "Think Globally, Buy Locally – New Approaches to Professional Cleaning and Care".

This conference is aimed at manufacturers and users of professional products and has been providing information on current developments in this field for over fifteen years. The conference was moderated by Tobias Potstada and covered three thematic areas.

Due to the disrupted supply chains caused by the COVID-19 pandemic, two presentations focused on supply security. One presentation highlighted the issue from the perspective of an association (*Mr. Entner*, Presentation 1), and the other from the perspective of a distributor (*Mr. Heimbach*, Presentation 2).

Environmental protection has a strong influence on formulations in the field of cleaning and care due to various existing or anticipated regulations. The topic of microplastic avoidance has been a concern in the industry for some time and will continue to be so, as the filtration of fibrous microplastics in washing machines will be mandatory in France from 2025. Three presentations showcased the range of challenges in this regard. These included an examination of legislative aspects within the framework of ECHA regulations (*Mr. Entner*, Presentation 4), a presentation of findings on the formation and prevention of microplastics during washing (*Brandt*, Presentation 3), and an exploration of the handling of microplastics in floor care by a polymer manufacturer (*Ms. Mannheim* and *Mr. Bach*, Presentation 5). Thus, there is a need for biodegradable components in floor care products, such as polymers based on PU (*Mr. Bernhard Sölle*, Presentation 6), wood-derived glycols (*Mr. John*, Presentation 7), or natural waxes (*Dr. Krendlinger*, Presentation 8).

A practical perspective rounded out the program. One presentation provided an update on the current state of solar cleaning from a manufacturer of solar cleaning systems (*Mr. Kneiber*, Presentation 9), while another took a closer look at questionable cleaning methods from the perspective of a cleaning product manufacturer (*Ms. Nerowski*, Presentation 10).

As usual, on the first day's evening, attendees had the opportunity to exchange information and industry news on the lakeside terrace. The next conference is expected to take place in May or June 2024 in Constance.

Presentation 01: Raw Material Supply in Uncertain Times (*Marcello Entner*, Austrian Federal Economic Chamber / Association of the Chemical Industry of Austria (FCIO))

In his presentation, Mr. Marcello Entner from the Association of the Chemical Industry of Austria (FCIO) described the economic situation of the European chemical industry. Based on current data, he referred to the positive development of sales in recent years, particularly since 2021. However, this trend in sales figures is primarily attributed to inflation, as the production volumes have not increased to the same extent.

One of the main drivers of price increases mentioned by Mr. Entner is the rising energy prices, which have currently stabilized at a high level after a significant increase. For example, this trend in energy costs led to a 17% increase in manufacturer prices for soaps and detergents in the EU compared to the previous year. Consequently, this will result in a competitive disadvantage for Europe.

The chemical industry is also concerned about the shortage of skilled workers. 72% of the surveyed companies stated that they are heavily affected by the shortage of skilled workers, which has a significant impact on business operations and expansion efforts. The prevailing inflation also drives up labor costs and exacerbates the situation further.

Despite the significant economic challenges, Mr. Entner concluded his presentation with a cautiously positive outlook, partly because the sentiment in the chemical sector is gradually improving.

Presentation 02: Supply Security and Supply Chain Issues from the Distributor's Perspective (*Daniel Heimbach*, Julius Hoesch GmbH & Co. KG)

The past few years have certainly not been easy for producers of cleaning and care products in terms of product availability, marked by volatility and fluctuations. However, this challenging time has brought about significant changes not only for customers but also for raw material distributors. Mr. Daniel Heimbach, Head of Sales & Procurement at Julius Hoesch, explained in his presentation how the supplier of industrial and specialty chemicals has dealt with these challenges. The three phases of the supply chain – procurement, production, and distribution – have faced unprecedented problems within a short period of time:

Due to the pandemic, demand plummeted within a few weeks, and even in recovering markets, supply chains remained disrupted. This was further compounded by long-standing trade disputes between the US and China, the Ukraine conflict, and individual events such as the Ever Given container ship incident. At the same time, new regulatory requirements such as the Supply Chain Due Diligence Act came into effect. These challenges were further compounded by a shortage of skilled workers in the logistics sector.

To better mitigate these events, which are beyond the distributor's control, and to prevent supply shortages in the future, various strategies have been defined. These include diversifying suppliers, strengthening the sourcing strategy in Europe, and establishing transparent supply chains. Additionally, inventory management is being optimized.

To reduce risks in the long run, a sustainable multi-supplier strategy is being pursued. Moreover, awareness of the relationship between price and performance must be established, allowing for a confident stance against the "cheap is good" logistics and procurement mentality.

Presentation 03: New Insights into Sources, Sinks, and Solutions for Fibrous Microplastics (*Stefan Brandt*, University of Applied Sciences Niederrhein, Krefeld)

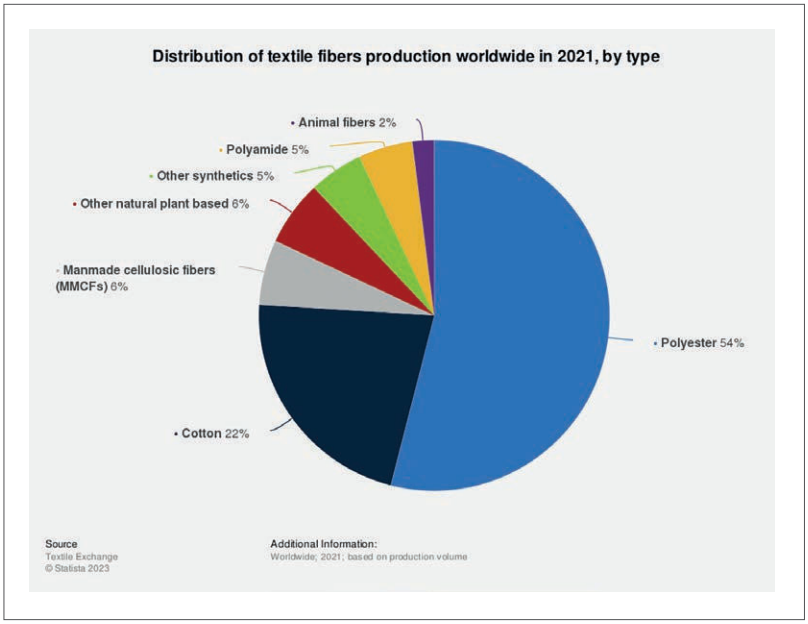
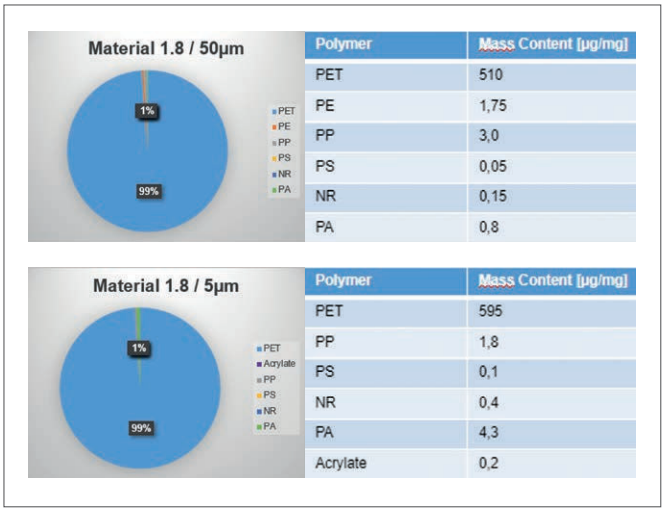


Fig. 1 – The global distribution of fiber types in fiber production in 2021 shows that polyester dominates the world fiber market with 54%. Source: Statista based on data from Textile Exchange.



Polymer	Mass Content [µg/mg]
PET	510
PE	1,75
PP	3,0
PS	0,05
NR	0,15
PA	0,8

Polymer	Mass Content [µg/mg]
PET	595
PP	1,8
PS	0,1
NR	0,4
PA	4,3
Acrylate	0,2

Fig. 2 – Quantification of polymers retained by various filters with mesh sizes of 50 µm and 5 µm. The respective proportions were determined by the laboratory method TED-GC/MS by the Federal Institute for Materials Testing.

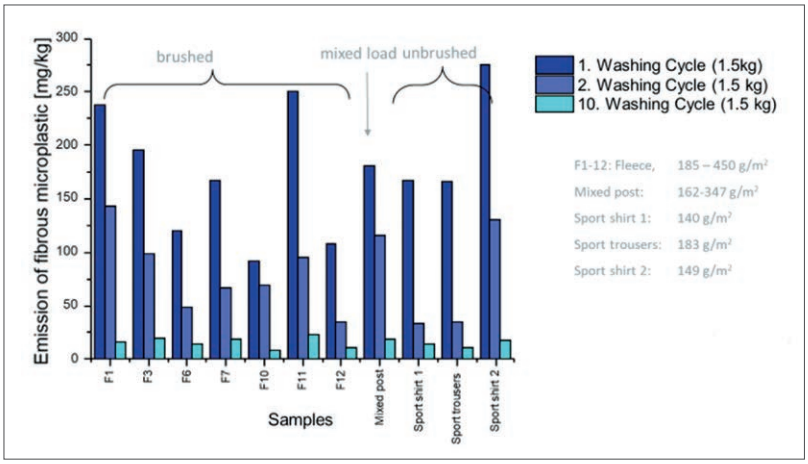


Fig. 3 – The release of fibrous microplastics during the first wash accounts for 40–60% of the sum of the first ten washes.

At the beginning of the presentation, Mr. Brandt explained the definition and differences between specifically fibrous microplastics from textiles and microplastics in general. Microplastics are defined as particles with a diameter of less than 5 mm. In contrast, fibrous microplastics are usually only a few micrometers thick, which allows them to easily reach wastewater treatment plants. However, the microplastics retained there are not disposed of through incineration but are instead, to a significant extent, spread as fertilizer on fields through sewage sludge, thus remaining in the environment. In Germany, approximately 80 g of fiber abrasion from synthetic textile washing is released per person annually. According to an estimate from 2017, fibrous microplastics from synthetic textiles account for 35% of the microplastics in the world's oceans. This high contamination is caused by the large proportion of polyester fibers in textiles, accounting for about 50% (**Figure 1**).

These fibers are mainly used in outdoor clothing, which has a high growth rate, as well as in bulky knits (fleece®).

The TextilMission project was launched in 2017, involving various partners (University of Applied Sciences Niederrhein, Technical University of Dresden, WWF, Henkel, Miele, BSI, adidas, VAUDE, and POLARTEC). Through interdisciplinary collaboration, analyses were conducted, and solutions for reducing fibrous microplastics were identified.

To determine the impact of domestic laundry on microplastics, washing tests were carried out under various conditions. Small washing loads of selected top-selling outdoor and sports apparel were washed with liquid detergent in a household front-loading washing machine using the Easy Care 40°C program. Subsequently, the wastewater from the washing machines was filtered sequentially through different steel filters (1.5 mm, 0.5 mm, 0.15 mm, 50 µm, and 5 µm). The amount of retained microplastics was determined gravimetrically. The quantification of the found polymers was performed in the laboratory using TED-GC/MS. At the filter sizes of 50 µm and 5 µm, 99% of the captured samples were quantified as PET originating from the textiles. The other polymers likely originated from contamination with other types of microplastics found in households and laboratories (**Figure 2**).

An important finding was that a significant amount of fibrous microplastics is released, particularly during the first and second washes. When the microplastic quantities from the first 10 washing cycles are added together, approximately 50% of the total amount is released during the first wash (**Figure 3**).

Based on these results, Mr. Brandt, on behalf of the TextilMission project, recommended avoiding "fast fashion" and opting for high-quality fibers or clothing. The more frequently the fiber is washed, the lower the loss of fibrous microplastics. Additionally, the release can be reduced through higher load quantities and optimized utilization of washing machine capacity.

According to the EU Textile Strategy, various measures are aimed at avoiding or reducing microplastics throughout the product life cycle, including mandatory requirements for product design, controlled manufacturing processes, promotion of innovative materials, optimized washing machine filters and detergents, as well as setting microplastic limits. Mr. Brandt sees the enzymatic degradation of PET fragments in wastewater treatment plants and the development of new materials for innovative fiber types that possess better biodegradability as perspectives for addressing the issue.

Presentation 04: Microplastic Restriction Sales according to ECHA (*Marcello Entner*, Austrian Federal Economic Chamber / Association of the Chemical Industry Austria (FCIO))

Mr. Marcello Entner summarized the planned microplastic restrictions of the EU regulation, which will come into effect in the third quarter of this year, in another presentation. He first addressed the definition of microplastics or "Synthetic Polymer Microparticles" (SPM). SPM particles are defined as particles containing an encapsulation or solid polymer content of ≥ 1% (w/w). Such particles with a diameter of ≤ 5 mm or fibers with a length of ≤ 15 mm and a diameter of ≤ 3 mm fall under the restrictions of the forthcoming regulation.

Products that add SPM to achieve certain properties at more than 0.1 weight percent are affected by the restriction. However, if the release of SPM into the environment can be prevented by the chemical or physical properties of the product in its end use or if emissions are already avoided by other regulatory measures, there are exceptions to the prohibition of placing on the market (§ 4 and 5).

This point was highly debated among the participants during the event on both days. For example, is the application of floor care products and subsequent removal of the coating with cleaning agents considered an introduction into the environment or not? The fact is that floor polish products are explicitly listed in the regulation. Clarification on this point will likely have to await accompanying guidance documents. The exceptions for which the regulation does not apply include: • Natural polymers • Polymers that do not contain carbon • Water-soluble polymers (solubility ≥ 2 g/L) • (Biologically) degradable polymers

After the regulation comes into effect, authorities can request mandatory information on polymer identity. This request must be responded to within a feedback period of 7 days. The requested detailed information may include names (IUPAC), CAS, EC number, molecular weight (range), analytical data, associated methods, and information on the function of the polymer. If the information is not yet available, there is a 30-day feedback period for the supplier. Transition provisions apply to various product categories, with the following deadlines: • Rinse-off cosmetics (4 years) • Detergents, waxes, polishes like floor polish (5 years) • Encapsulated fragrances (6 years) • Leave-on cosmetics (6 years) • Makeup, lip, and nail products (12 years)

Furthermore, according to the regulation, there is an obligation to provide information on SPM/microplastics in the product on labels, packaging, package inserts, and safety data sheets starting from the second year after the regulation comes into effect. Digital tools such as QR codes are only permitted as complementary means.

In conclusion, Mr. Entner provided an outlook on forthcoming regulatory measures regarding SPM that will impact the industry in the future, such as regulations on dishwasher and laundry detergent capsules.

Presentation 05: Microplastic – A Challenge in Floor Care from a Polymer Manufacturer's Point of View (*Christelle Mannheim* and *Armin Bach*, Zschimmer & Schwarz Group)

After the legal classification, the challenges faced by floor care products with microplastic-containing formulations were presented. The entry of microplastics through cleaning and care products is very low, but there is a clear need for action. Every measure counts, and everyone must take responsibility. For example, it was pointed out that the use of cleaning agents in the North East Atlantic region leads to an annual entry of 100,000 kg of microplastics into the marine environment. The most radical step would be to completely eliminate the use of floor care products. However, it is also argued that the use of these products can help reduce environmental impact by increasing the lifespan of floor coverings and reducing cleaning efforts. In addition, the ingredients are only partially affected by microplastic restrictions since, for example, the micro-particles contained in floor coatings form a closed layer during film formation and are therefore no longer subject to the restrictions. However, it is expected that regulations will become stricter in the long term, so proactive planning should be considered. Another problem is that conventional ingredients of floor care products, such as polymers (acrylates) and waxes, often contain polyethylene (PE), both of which are poorly biodegradable.

The company calls for new global standards, increased investments in research for sustainable and biodegradable substitutes, and more green innovations. They aim to lead by example.

Presentation 06: Biodegradable Polymers for PU-based Floor Care Products (*Bernhard Sölle*, Polymer Competence Center Leoben GmbH (PCCL))

To address the challenges arising from the SPM restrictions in the field of floor care, Mr. Bernhard Sölle reported on initial research results from his dissertation on biodegradable PU-based polymers for floor care products, supported by the Austrian Research Promotion Agency. The project aimed to find substitution options for the predominantly used acrylates in the field of floor care, which are non-biodegradable or have low biodegradability.

Therefore, Mr. Sölle primarily synthesized polymers with "labile" groups, such as ester groups, to enhance biodegradability. However, pure polyesters proved to be too "soft" or not sufficiently resistant for use in heavily stressed floor care coatings. Consequently, he focused on the synthesis of polyurethanes in the further course of the research project. By using different polyester diols in the synthesis, it is possible to adjust various polymer properties, such as biodegradability and hardness / resistance.

After a brief overview of step-growth reactions such as polycondensation and polyaddition, Mr. Sölle detailed the polymer syntheses conducted in his work and the possibilities to influence the desired properties accordingly.

Initial formulations of floor care coatings showed promising results but exhibited lower resistance and poorer soil repellency compared to standard coatings upon closer examination. However, external tests of biodegradability according to OECD 302B already showed biodegradabilities of up to 30% for the polymer prototypes.

As another highlight of the project, Mr. Sölle introduced covalently bound fluorescent markers (naphthalimide derivatives) into the polymer structure during the synthesis to enable the detection of SPM (microplastic particles) in wastewater, sludge, etc., for better tracking of the fate of SPM in the environment.

Presentation 07: Circular Economy: Bioglycols from Wood (*Holger John*, UPM Biochemicals, Helsinki)

In his presentation, Mr. Holger John from UPM Biochemicals in Helsinki reported on the development and production of glycols from renewable raw materials. Ethyleneglycol and propyleneglycol can be produced from wood as the base material. Initial samples have already been made available and tested. The CO_2 footprint has been determined and certified by DEKRA. FSC-certified beech wood is used for production, which is harvested within a radius of 150 – 600 km around the Leuna production site.

The share of beech trees in German forests is 16% (2021), and it is projected to increase to 21% by 2050 through the cultivation of mixed wood. Wood is a renewable and climate-neutral resource. Sustainable forest management and forestry practices are essential to achieve global CO_2 sequestration goals. This involves controlled harvesting and replanting, as young trees can absorb more CO_2, creating a renewable cycle.

The hardwood from the tree trunk is used in the furniture industry, but a large proportion of the remaining tree components are currently only used for energy generation. The plan is to produce bioglycols from this combustion wood and the ongoing thinning wood.

Mr. John highlighted the following advantages: Bioglycols are 100% bio-based and can have a better carbon footprint and CO_2 impact compared to fossil fuels. The beech wood is sourced and distributed regionally and is vegan. Bioglycols can also replace conventional glycols as a raw material for PET production, enabling a bio-based content of up to 30%.

Presentation 08: Natural and Biodegradable Waxes for Use in Microplastic-Free Floor Care Products (*Dr. Ernst Krendlinger*, EPW GmbH)

Dr. Krendlinger, former Head of Development at Clariant, Lubrizol, and Deurex, as well as a recipient of the European Inventor Award, illustrated the possibilities of using natural waxes in polymer coatings, both theoretically and with practical examples.

Due to the upcoming restrictions on the intentional use of microplastics, traditional fossil-based PE and PP waxes in floor care products are facing limitations. One solution is to look to nature, as natural waxes are not covered by the planned ECHA regulation. In addition to the well-known but too soft for floor coatings beeswax, the properties of the much harder and already industrially used Brazilian carnauba wax were discussed. The lesser-known but still relevant candelilla and sunflower waxes, with a melting point of around 70°C, were also examined practically with provided samples.

A waste product of sugar production is sugarcane wax, which is present in the sugarcane itself at only 0.1%, but can be found in the bagasse (filter cake) at 8-10%. This bagasse, which has been deposited in landfills in the main cultivation areas for decades, can now be exploited through landfill mining. With a high melting point and low acid value, the properties relevant to floor care products align with the new rising star: rice (bran) wax. This wax exhibits properties that can compete with the synthetic hydrocarbon waxes used so far.

Even more exotic waxes were mentioned to illustrate that waxes can be found in unusual places, such as the wax properties of earwax and the particularly hard wax from scale insects used in shellac production.

Presentation 09: Practical Insights from PV Cleaning (*Josha Kneiber*, TG hyLIFT GmbH)

Germany's ambitions regarding the expansion of photovoltaic (PV) systems are evident with the Renewable Energy Sources Act, which came into effect in 2023. According to this act, the currently installed PV capacity is set to increase by over 330% by 2030. The necessity and benefits of sustainable energy should be generally known. In his presentation, Josha Keiber, Managing Director of TG hyLIFT GmbH, discussed the importance of PV system cleaning and the associated challenges.

The type and intensity of dirt accumulation vary depending on the region, type of installation, location, season, and weather conditions. However, it is clear that higher dirt accumulation leads to greater loss of energy yield. In Germany, not cleaning the PV panels can result in a loss of around 10%, while in "dusty weather conditions without rain," this figure can quickly exceed 20%. Therefore, cleaning is necessary. The use of unsuitable techniques and methods, such as using a freely moving robot on a steep surface and/or using the wrong cleaning chemicals, can lead to the robot sliding off the roof, making the investment in cleaning far from profitable. Similarly, treating a concrete plant's PV system with water to remove cement dust would be counterproductive. Too abrasive bristles could damage anti-reflective coatings, reducing the system's energy yield despite cleaning. The use of certain chemicals requires the capture of wash water, making the cleaning of large systems economically unfeasible.

In summary, it is important to differentiate that not every cleaning method is suitable for every PV system. While simple handheld brushes may be suitable for smaller, easily accessible systems, it is recommended to invest in expensive specialized equipment or hire specialized service providers for other systems.

Presentation 10: Critical Examination of Questionable Cleaning Methods (*Bianca Nerowski*, TANA Chemie GmbH)

In the last presentation, Bianca Nerowski discussed the issues with various cleaning methods. She started with a brief summary of the definition of dirt (misplaced matter) and cleaning (removal of dirt). Then, Ms. Nerowski presented three cleaning methods that are often marketed as supposed solutions for private and building cleaners: UV-C light, ozone, and dry steam.

The DNA-damaging effect of UV-C light (wavelength of 200 to 280 nm) has been known for decades and is used, for example, for surface disinfection in hospitals. However, criticisms of this method include non-compliance with disinfection times, inadequate safety labeling that prohibits entering the treated areas, and the lack of effectiveness on shaded surfaces.

Dry steam refers to water vapor heated to 150 °C, where, unlike conventional (wet) steam, there is no liquid phase present. This medium can be used in appropriate cleaning devices to cause adhering dirt on surfaces to simply peel off through rapid heating. It is often claimed that 99.9% of germs on the surface are killed. However, this advertising claim is criticized because a germ reduction of a factor of 105 ("99.999%") is usually required to speak of disinfection. Nevertheless, slogans such as "No more health-endangering chemical disinfectants: Steam works faster than disinfectants!" are used in advertising. Ms. Nerowski emphasized that contrary to these claims, this method is also ineffective against house dust mites and therefore does not provide relief for allergy sufferers.

Finally, ozone (O_3) is discussed as a problem-solving method. Due to its strong oxidative properties, ozone decomposes odor

molecules and kills microorganisms, making it suitable for disinfection and odor elimination. However, the use of ozonated water in washing machines and dishwashers is criticized because the ozone molecule is unstable. It decomposes in distilled water after about 30 minutes and in the presence of dirt, it only takes a few seconds. Thus, there is not enough time for a disinfecting effect. Ozone spray bottles are often marketed as cleaning agents for quick and comprehensive "hygienization," although the precise meaning of this term remains open to interpretation for the recipient.

Tobias Kimmel, Chairman; Tobias Potstada, Secretary;
Andreas Leismüller, Robert Kreische, Lea Kalz, Advisory Board;
SEPAWA® Specialist Group Professional Cleaning and Care

6.2. SEPAWA® Specialist Group Cosmetic Applications and Technologies (CAT)

The SEPAWA® Specialist Group Cosmetic Applications and Technologies (CAT) organized a lecture event which took place on 9th and 10th May at the Maritim Hotel Würzburg, under the theme "Brave New World" – What Contribution Can the Cosmetics Industry Make?

As usual, the event began with an accompanying program the day before. A sunny city tour provided interesting insights into the history of Würzburg and the opportunity to see its beautiful buildings. This was followed by a visit to the Kneipp store and the mandatory glass of wine in the sun set on the "Alte Mainbrücke". The day ended successfully with a shared dinner at the "Alte Mainmühle", which provided a wonderful opportunity for attendees to engage in conversations.

The main event on the following day focused on the challenges currently facing the cosmetics industry, with a particular emphasis on sustainability and factors that have the potential to positively influence the industry. These included energy optimization in cosmetics production and the implementation of effective raw material recycling strategies.

Sarah Frech from BEAUTYSTREAMS opened the lecture event with her presentation on Intersectional Beauty. Intersectional Beauty is based on the concept that each consumer has a variety of different needs that intersect with one another. This leads to the challenge that there are almost as many consumer goals as there are individuals. Today's consumers expect a more personalized approach, taking into account the many facets of cultural, geographical, spiritual, social, and genetic influences. In this context, there are market opportunities for the development of products that combine modern science and traditional medicine or consider lifestyle, environment, as well as skin and hair types. Moreover, products can be tailored specifically to address the needs of older age groups or unique requirements.

Keynote speaker *Anne Fierhauser* provided a fascinating insight into the world of face reading. She captivated and inspired the audience with new perspectives derived from ancient teachings. Her presentation provided us with an insight into her expertise and her unique approach to face reading. Based on individual facial features, Anne Fierhauser creates in-depth personality analyses, identifies strengths and potentials, and helps corporations and companies achieve sustainable success.

In a tandem presentation, Isabel Simon from Kneipp GmbH and *Prof. Dr. Ralf Stürmer* from Psyrecon GmbH presented interesting findings on the aromacological product performance and psychophysiological effectiveness of a citrus-scented shower product based on essential oils. Skin cleansing can have a psychophysiological dimension of effectiveness beyond the mere removal of dirt, especially due to the aromacological effects on emotions and well-being. To investigate these psychophysiological effects of a citrus-scented shower product, Simon and Stürmer developed a study design to capture the aromacological effects under "realistic" conditions using Objective Emotional Assessments (OEA). This involves the simultaneous measurement of electrodermal activity, electrocardiogram, electroencephalogram and electromyogram. The results showed that the product was rated by the participants as

▲ *Lecture room, Maritim Hotel in Würzburg*

'invigorating', 'refreshing', 'stimulating', 'activating' and 'mood enhancing'. The activating and stimulating effects of the citrus-scented shower gel were also confirmed by the OEA measurements.

Dr. Kerstin Effers from the Consumer Center (Verbraucherzentrale) gave a presentation on more sustainable cosmetics, consumer protection, and environmental protection. The cosmetics industry can play an important role in several of the United Nations' sustainability goals, such as promoting sustainable consumption and production, implementing climate change mitigation measures, and preserving and protecting marine life. The trend towards more sustainable, packaging-free cosmetics is also evident in the growing popularity of solid cosmetic products. The solid alternatives for shampoos, shaving soaps, deodorants, body butters and more have now made

their way from zero-waste stores to drugstores and supermarkets. Because of their solid form, they require less packaging material, are more energy efficient to produce and have a lower impact on wastewater resources. The Consumer Centre's environmental advice service regularly runs campaigns to educate consumers about environmental protection and waste reduction in this area.

Dr. Andreas Reinhart (REINHART Rechtsanwälte Partnerschaft mbB) gave a presentation titled "Environmental Advertising for Cosmetic Products – Legal Boundaries" in which he addressed the current developments at the EU level. The European Commission has been dealing with the issue of greenwashing, which refers to misleading advertising in the environmental sector. The current legal framework includes Article 20 of the EU Cosmetics Regulation, which sets out a general prohibition on misleading advertising for cosmetics, as well as the Cosmetic Claims Regulation 655/2013, which only sets out general criteria. In addition, there is the EU Ecolabel, which has been extended to 'leave-on' products and provides an incentive for industry to work more with it, provided that specific criteria such as biodegradability and environmentally friendly packaging are met. However, labels such as 'carbon neutral' or 'CO_2 neutral' are currently much more common in the market. Consumers are often unaware that part of the carbon footprint is offset through compensation or the purchase of carbon credits. Considering this issue, the European Commission proposes to amend Directives 2005/29/EC and 2011/83/EU to prohibit opaque and unreliable sustainability seals or information tools. It is proposed to include this in Annex 1 of the Directive and to add a blacklist of such bans. In addition, at the end of March, the draft Green Claims Directive was presented, which complements the EU Commission's draft directive amending the UCP Directive.

▲ *CAT Specialist Group members (left to right): Nicola Kricsfalussy, Sopna Thill, Leslie Schlüter, Carolin Hein, Astrid Wulfinghoff, Ralf Kuschnereit, Sandra Spiegelberger, Christian Schmidt, Alina Maier, absent: Kristin Nessbach*

Judith Fiedler demonstrated in her presentation "Unlocking the Potential of Energy Optimization in Cosmetic Production" how these climate goals can be implemented in cosmetic production. The cosmetics industry consumes significant amounts of energy, and the production of cosmetic emulsions contributes significantly to this consumption. Energy optimization starts with the development process of cosmetic products. By choosing energy-efficient ingredients, implementing environmentally friendly production methods and using suitable testing methods, the energy demand to produce cosmetic emulsions can be reduced. It is important to generate more knowledge about the fat phase, such as the melting point and solidification point. Conscious consideration should be given to the choice of raw materials and how volume proportions can be optimized. In particular, the water phase has an unfavorable energy profile during heating and cooling.

Marc Cöslin from ProXES built on the topic of energy saving in his presentation "Energy Saving with Natural, Cold-Processed Emulsions".

In this context, he presented various manufacturing methods for emulsions using vacuum process systems and emphasized the advantages of cold processing, to reduce energy costs and CO_2 emissions. The technological implementation of cold processing not only offers ecological benefits but also enables efficient utilization of time resources that can be allocated to other production approaches. To illustrate the differences between hot and cold processing, Cöslin presented an example. It became evident that hot processing consumed 87 kWh of energy and took 106 minutes, whereas cold processing only required 6 kWh of energy and 36 minutes. These figures highlight the significant potential for savings associated with cold processing compared to conventional hot processing.

The trend is increasingly moving towards the cold processing of products as manufacturers are recognizing that this efficient method allows them to reduce energy costs, decrease CO_2 emissions, and meet the rising consumer demands.

Carbon dioxide is generally considered a pollutant and plays a significant role in climate warming. In this context, new possibilities arise for fermentation. With the help of an innovative biotechnological process, valuable raw materials can be obtained from CO_2. This technology, also known as CO_2 recycling, opens a new chapter in the circular economy. Bernd Söllner from Mibelle highlighted in his presentation the potential of this technology. Through fermentation and biocatalysis, bacteria can be cultivated in bioreactors to capture CO_2 from the air and convert it into valuable products. This innovative approach allows for the integration of CO_2 into a cycle and ensures sustainable utilization. In addition to the production of basic materials such as ethanol, CO_2 recycling also offers new possibilities in the field of packaging through the production of PET (polyethylene terephthalate). By considering CO_2 as a valuable resource, CO_2 recycling can help reduce the negative impacts on the climate and promote a sustainable cycle. The development and application of this technology opens new perspectives for a future-oriented and resource-efficient economy. Thus, CO_2 recycling represents an important step towards a sustainable and climate-friendly future.

The presentation by *Willi Moor* from Döhler titled "From Waste to Valuestream" addresses the various by-products and waste streams in the food industry, as well as the technologies and measures for extracting new raw materials for the cosmetics industry through juice production.

Through targeted processing and treatment technologies, these by-products are transformed into valuable raw materials. The focus is on a complete plant upcycling process.

For example, plant-based color pigments, hydrolates, milled fibers, or flavored water are produced, which are used in different applications.

Election SEPAWA® e.V. Specialist Group CAT

On June 16th, the board election of the SEPAWA® e.V. Specialist Group Cosmetic Applications and Technologies (CAT) took place, led by Holger Plate.

The members of the previous board were discharged, and the newly elected board, unanimously chosen, consists of the following individuals: Dr. Kristin Nessbach, the former secretary, has been promoted to the position of 1st Chairwoman, replacing Astrid Wulfinghoff. Sandra Iris Spiegelberger and Dr. Leslie Schlüter remain in their positions as 2nd Chairwoman and Treasurer, respectively. The new Secretary is Christian Schmidt.

The CAT Specialist Group would like to take this opportunity to express its sincere gratitude to Astrid Wulfinghoff, a long-time member who led the Specialist Group as 1st Chair for six years. Her dedication and leadership significantly contributed to the success of CAT.

Carolin Hein, Dr. Leslie Schlüter, Dr. Kristin Nessbach
SEPAWA® Specialist Group Cosmetic Applications and Technologies

6.3. SEPAWA® Specialist Group Innovative Cleaning (IR)

The SEPAWA® e.V. Specialist Group "Innovative Cleaning" hosted the specialist lecture event on the topic of Sustainability through Improved Hygiene on January 18–19, 2023, in Freising, Germany, with grateful support from the Fraunhofer Institute for Process Engineering and Packaging IVV. A special thanks goes to *Arielle Springer* and *André Boye* in this regard.

After the welcome by *Ralf Döring*, we were able to enjoy an extensive tour of the Fraunhofer Institute for Process Engineering and Packaging IVV. Subsequently, we commenced with the specialist lectures. These began with a presentation by *Mr. Sandro Großmann* from Ecolab Germany on Bottle Cleaning – Chemical Boundary Conditions. *Mr. Thomas Weyrauch* from Hohe Tanne GmbH then presented New Technologies for Adaptive Tank Cleaning, and finally, we had the pleasure of a presentation by *Mr. Israel Capitillo* from HTS on Cleaning through Microorganisms. Not yet fatigued by enjoyment in general, dinner took place at the oldest brewery in Germany – the Braustüberl Weihenstephan.

The second day of the conference started with a presentation on Surface Disinfection and Microbiological Validation of Systems by *Mr. Joachim Wunderlich* from Fraunhofer IVV. Following that, there were interesting insights into Antimicrobial Peptides by *Dr. Konstantinos Antonopoulos* from mk2 Biotechnologies GmbH. Building on the topic of microbiology, there was a presentation by *Ms. Renate Borgmann-Strahsen* from Nouryon on the Efficient Application of Biocides. After a well-deserved coffee break, we continued with a presentation on Plasma-Activated Water for Surface Sterilization by *Prof. Dr. Thomas Schmitt-John* from Plasmatreat GmbH. To conclude the event, *Mr. André Boye* from Fraunhofer IVV spoke about Hygienic Design and its Verification.

Outlook for 2024:

The specialist lecture event in 2024 will take place on February 21 – 22, 2024, at the Dorint Hotel in Düren, under the theme "Sustainability vs Convenience". We hope for numerous participants. Once again, we will have an interesting mix of specialist lectures and will have the opportunity to tour Julius Hoesch.

Adrian Zuberbühler, Secretary,
SEPAWA® Specialist Group Innovative Cleaning

6.4. German Association of Perfumers in SEPAWA® e.V. (DGP)

DGP Spring Meeting 2022

Under the theme "Back to the Future," the first DGP event of the year took place on March 23rd and 24th, 2023, in Bad Dürkheim – the DGP's Spring Conference.

The conference venue holds historical significance as the Kurpark-Hotel, where the DGP was founded in 1979.

However, the lecture and visit program focused entirely on current and future developments. Emphasis was placed on ensuring safe and sustainable raw materials and product offerings. The company visit to BASF in Ludwigshafen also highlighted the sustainability of entrepreneurial activities.

The professional conference began on Thursday, March 23rd, 2023, with a lunch break at the conference hotel. For all 64 participants, this was an excellent opportunity to network extensively within the fragrance industry.

The presentation program commenced with a report from the board presented by DGP President *Dr. Edison Diaz*. Looking back at 2022, Dr. Diaz recalled the DGP Spring Conference in Barcelona and the contributions of the DGP at the SEPAWA® Congress in October 2022.

In commemoration of the DGP's 40th anniversary in 2019, the society's chronicle had been updated, available for viewing in the conference room. Dr. Edison Diaz presented copies of the chronicle to the present former presidents of the DGP, Honorary Presidents *Dr. Alexander Boeck* and *Dr. Wolfgang Krause*, with heartfelt thanks for their longstanding dedication to the concerns of perfumery.

The next Spring Conference is scheduled to take place at the end of April 2024 in Prague. Additionally, a study trip to Vietnam is planned for 2025 or 2026.

The series of presentations commenced with Dr. *Maren Protzen* (Joh. Vögele KG) delivering a lecture titled "Palmarosa Oil – From the Field to ISO Standard." ISO, the International Standards Organization, is an international association of standardization organizations established in 1947. Within Technical Committee 54, it focuses on developing standards for Essential Oils, amounting to 138 standards presently. These standards are established and regularly reviewed by an expert panel. Dr. Protzen led the task of developing standards for Palmarosa oil through the national standardization organization DIN e.V.

Palmarosa oil is obtained through steam distillation from the aerial parts of *Cymbopogon martinii*, a sweet grass reaching up to 3 meters in height. Its main component is Geraniol. The aim in cultivating Palmarosa is to achieve a high Geraniol content, dependent on the duration of maturity. We were able to smell the pure Palmarosa oil and Geraniol obtained from distillation.

▲ *Dr. Edison Diaz with Dr. Alexander Boeck (left) and Dr. Wolfgang Krause (right)*

Palmarosa cultivation areas are located in Asia and South America. To develop ISO standards for Palmarosa oil, data from 58 batches of oil over 10 years were evaluated, originating from India (42), Nepal (9), Paraguay (5), and Guatemala (2). All samples were analyzed using gas chromatography for their composition and other properties such as odor, color, density, refractive index, optical rotation, and ethanol compatibility. None of the sources showed characteristic differences, allowing the establishment of a standard covering all origins. Statistical methods were then used to analyze the oils' parameters, setting typical values within the standard.

ISO standards describe how an Essential Oil appears. In contrast, pharmacopoeias also dictate which components should not be present or should be within specified limits. The revised ISO standard for Palmarosa oil was published in 2021. In Germany, the standard is directly adopted by the standardization organization DIN.

The subsequent presentation by *Dr. Sarah Haberkant* (BASF SE) was titled "Sustainability as an Accelerator for Innovations – How Sustainability is Transforming the Fragrance Industry."

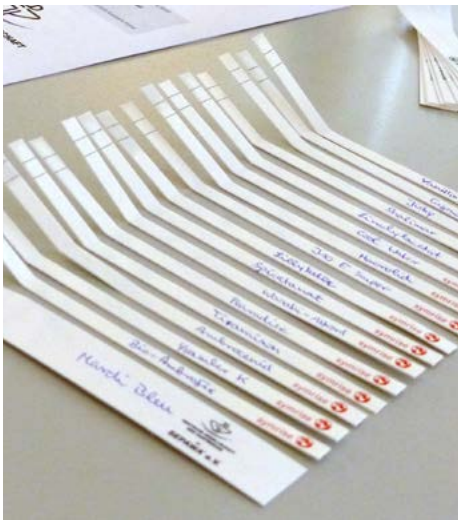
Numerous manufacturers in the value chain for flavors and fragrances have set ambitious goals for reducing CO_2 emissions. Different stages are considered here. Scope 1 and 2 refer to CO_2 emissions during product manufacturing and energy usage, where companies can intervene through innovative measures. Scope 3, however, relates to the CO_2 footprint of the raw materials used. Approximately two-thirds of CO_2 emissions in the fragrance industry stem from the raw materials utilized. Therefore, there's great potential in substituting fossil starting materials with renewable ones in the production of flavors and fragrances.

Presently, around 33% of raw materials are sourced from biomass. However, the available quantity is far from sufficient to meet market demands for a complete transition to these sources. Hence, new alternative raw materials derived from processed plastic waste or organic waste are of interest.

Yet, in a large-scale production setting like BASF's, establishing the manufacturing of aroma chemicals entirely from these alternative sources wouldn't be cost-effective. Hence, BASF advocates for the mass balance approach. Here, both alternative and fossil starting materials are used and processed uniformly in subsequent steps. While the exact quantity of sustainable or renewable starting material can't be certified in the end product, the mass balance of all utilized starting materials allows calculation of the contribution to CO_2 reduction, certified by an independent auditing institution.

▲ *Dr. Maren Protzen*

▲ *Dr. Sarah Haberkant*



▲ *Dr. Philip Kraft and the Audience. Dr. Kraft's presentation, with a total of 17 scent samples, was impressively impactful!*

While there's no industry-wide and uniform definition for "renewability," the CO_2 footprint can be calculated quite accurately. Hence, the CO_2 emissions associated with a raw material could serve as a viable "new currency" guiding sustainable purchase decisions. This approach is part of a pilot project involving over 50 participating companies aimed at achieving broad acceptance. The necessary innovation for a more sustainable production of flavors and fragrances can only succeed through close collaboration among all companies.

In an ensuing intensive discussion, *Alain Frix* pointed out that lignin, a material available in large quantities, could offer much potential as an alternative raw material.

After a coffee break, the next presentation offered an exciting tour de force through scent chemistry. *Dr. Philip Kraft* (Symrise AG) presented "Perfumery 2030: What Does the Sustainable Future Smell Like?" Introducing fragrances from the beginning of synthetic scent production until today, he classified them regarding sustainability and biodegradability.

Using the example of Vanillin, industrially produced in 1874 by Wilhelm Haarmann from the cambial juices of conifers, he showcased a fragrance derived from renewable resources, yet its synthesis was neither green nor environmentally friendly. Today, Vanillin is obtained from wood industry waste using an improved synthesis method. Vanillin, along with Coumarin, is a significant component of the base notes in Jicky and Shalimar, iconic fragrances still present in today's market, which were sampled.

Dr. Kraft emphasized that perfumes need a signature to succeed. High environmental compatibility and sustainability pair exceptionally well with very intense fragrances. However, compromises are often necessary in scent research between selecting renewable raw materials and the goal of finding intensely fragrant substances.

Approaches in scent research have also evolved over time. Initially, inspiration came from natural substances and their synthesis. In a second phase, industrially attractive reaction sequences were extensively tested. For instance, this led to the discovery of Sandalwood alcohol from terpene olefins as the first synthetic Sandalwood fragrance by Albert Weissenborn (I.G. Farben) in the early 1940s. Iso E super, discovered by John B. Hall and James S. Sanders (IFF) in 1975 during systematic studies of the Diels-Alder reaction of Myrcene, is sustainable in its original form, but Iso E super itself lacks biodegradability.

The third phase involves the targeted, performance-oriented design of fragrances. This succeeds when the olfactorily effective structural elements are understood. An example is the transition from macrocyclic musk compounds to horseshoe-shaped linear molecules.

Unilever has set a goal to manufacture all its cleaning products from 100% sustainable and 100% biodegradable raw materials by 2030. This poses a significant challenge for fragrances, necessitating a departure from previously successful and familiar practices. Particularly, for musk, wood, amber, and floral notes, 100/100 fragrances are rare.

Dr. Philip Kraft introduced fragrances from Symrise's research, such as Lillybelle, Spicatanat, Pearadise, Tiramison, and Ysamber K, which largely meet the new requirements. Lastly, we had the opportunity to experience Mardi Bleu, a 100% sustainable and 61% biodegradable unisex fragrance by Anne Dussourt (Symrise).

For those wishing to delve deeper into scent chemistry, I would like to recommend the new edition of the book "Scent and Chemistry – The Molecular World of Odors," Wiley VCH 2022.

The last presentation of the afternoon was held by *Dr. Annika Batel* (BASF SE) under the title "Green Deal and the New Chemical Strategy – What Does 'Safe and Sustainable by Design' Mean for Fragrances?"

With the Green Deal, the European Commission aims to become the first climate-neutral continent by 2050 and keep the environment free from pollutants. This means that existing substances must be evaluated for their toxicity and environmental properties, and alternatives must be developed for high-risk substances. Such alternative substances should be developed following the principle that they are always safe and sustainable – Safe and Sustainable by Design (SSbD).

The European Commission's Directorate-General for Research and Innovation has published a recommendation proposing a step-by-step approach. Dr. Batel presented the core aspects of the Commission's proposal.

The evaluation of existing or new substances always begins with assessing safety in all possible application areas. The initial assessment is based on the hazards associated with the substance, regardless of the specific risk consideration for the intended use. For BASF, this means that the established stage-gate process in

Dr. Edison Diaz thanks Dr. Annika Batel (left). Dr. Edison Diaz receives the SEPAWA® e.V Gold Honorary Pin from Michael Fender (right).

raw material research must be supplemented by many more tests for hazards in additional application scenarios and an assessment of the sustainability balance of new substances. In the case of fragrances, additional testing for hormone activity (endocrine disruptors) and possibly neuro- and immunotoxicity is required. Environmental aspects will be assessed through life cycle analyses of the substances. Methods for assessing the impacts on social and economic sustainability do not yet exist.

Overall, SSbD requires many new tests, for which there are sometimes no harmonized or validated methods, and is highly complex. The Commission's recommendation initially envisages a testing phase and a voluntary reporting mechanism. For fragrances, BASF, together with IFRA and other companies, is actively engaged in stakeholder dialogue with the Commission to demonstrate through case studies how innovation can be successfully implemented within the SSbD framework. Ultimately, the procedures established in SSbD will become part of European legislation for the eco-design of sustainable products.

Following the presentation program, the DGP board was re-elected. Under the leadership of Michael Fender, a member of the SEPAWA® e.V. board, *Dr. Maren Protzen* was unanimously elected as the new chairwoman of the DGP. *Jörg Zimmermann* was also unanimously elected as her deputy and vice president. *Dr. Anneliese Wilsch-Irrgang* took on the role of secretary, and *Lars Schlüter* was reconfirmed as treasurer (both unanimously with one abstention).

After serving five years as DGP president, Dr. Edison Diaz did not seek re-election. Dr. Anneliese Wilsch-Irrgang thanked him on behalf of the DGP board and advisory board, as well as all DGP members, for his highly committed and very successful tenure. With many innovative ideas, outstanding teamwork, and his own enthusiasm, he has made an outstanding contribution to the DGP. The conference participants gave him prolonged applause. On behalf of SEPAWA® e.V., Michael Fender thanked Dr. Diaz and presented him with the honorary gold pin as a token of appreciation.

Dr. Maren Protzen introduced herself as the new chairwoman. She emphasized continuing the successful work and mentioned new plans such as introducing a DGP Perfumer's Award and representing the DGP on social media platforms.

The evening program of the conference began after a short break with a wine tasting hosted by BASF at the Kurpark-Hotel. BASF som-

Participants at the DGP Professional Conference 2023

melier *Marc Oliver Heilos* provided entertaining explanations about three special Palatinate wines. Following this stimulating start, the participants enjoyed the evening buffet at the hotel and took ample advantage of the opportunity to exchange ideas and network.

On Friday, March 24, 2023, the participants visited BASF SE in Ludwigshafen. At the newly created visitor center, we received comprehensive information about the company itself and its wide range of products. It was impressive to see how many products essential to daily life are provided by BASF. Illustrative exhibits and experiments introduced projects for establishing a circular economy and sustainable energy generation.

At the new BASF Visitor Center, a one-hour bus tour provided an overview of the highly integrated production at the plant, innovations in internal logistics, and numerous facilities dedicated to the safety of operations, employees, and the environment.

▲ *Marc Vesper, Dr. Edison Diaz, Steffen Götz, Dr. Maren Protzen, Rick Eipl, Silke Weyland and Dr. Wolfgang Krause*

Following this, *Steffen Götz*, Vice President Global Sales and Business Management Aroma Ingredients at BASF SE, welcomed us and explained that the sector of aroma raw materials has regained significance for BASF. Research in this area also focuses on sustainable products. The highly informative visit concluded with a snack at the Visitor Center.

We express our heartfelt thanks to BASF SE, *Wolfgang Krause, Marc Vesper, Rick Eipl,* and *Silke Weyland*, who perfectly prepared and supported our visit!

It's worth mentioning that insights into BASF's work at the Visitor Center and a factory tour, upon registration, are also available to private individuals—an opportunity that no interested party should miss!

Study Trip 2023

Following this delightful event, excitement for the next gathering – DGP Study Trip from April 24th to 29th, 2023, to Tunisia – was already building. The journey, primarily organized by our new Vice President *Jörg Zimmermann* (WALA Heilmittel GmbH), was well-received by the 25 participants. A detailed report on this can be found on our website (dgp-die-parfumeure.de > Veranstaltungen > Studienreisen).

SEPAWA® CONGRESS 2023

At the SEPAWA® CONGRESS 2023 from October 25 to 27, 2023, the DGP once again hosted the Fragrance Lounge and a lecture morning on Thursday. The theme for this year was ARTelier and Scent – the interplay of art and fragrance. Presentations in the field of multisensory experiences, including one by our 2023 Science Award winner David Reinbold, complemented the olfactory impressions that visitors could gain from the award-winning fragrances of this year's Call for Fragrance in the Fragrance Lounge. A detailed article about our activities at the SEPAWA® CONGRESS can be found in the 2023 annual report of the DGP – also on our website (dgp-die-parfumeure.de > Organisation > Jahresberichte).

Dr. Anneliese Wilsch-Irrgang, Secretary;
Jörg Zimmermann, Vice President; Dr. Maren Protzen, President;
German Association of Perfumers in SEPAWA® e.V.

7. Members

7.1. Corporative Members

AB Enzymes GmbH | Darmstadt, Germany
Adler International GmbH | Hamburg-Harvestehude, Germany
Adolf Würth GmbH & Co. KG | Künzelsau, Germany
AGATEX Feinchemie GmbH | Lambach / Edt, Austria
Albaad Deutschland GmbH | Ochtrup, Germany
ALLCHEMIX BV | Ninove, Belgium
Americol BV | Zaandam, The Netherlands
AmphiStar BV | Ghent, Belgium
AT-Automaterial GmbH | Hard, Austria
Azelis Deutschland Kosmetik GmbH | Ratingen, Germany
Azelis Switzerland AG | Pfäffikon SZ, Switzerland
BASF Belgium Coordination Center Comm. V | Waterloo, Belgium
Bell Flavors & Fragrances GmbH | Leipzig, Germany
Biolandes SAS | Le Sen, France

BK Giulini GmbH | Ladenburg, Germany
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Chemia Brugg AG | Brugg, Switzerland
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Cid Lines N.V. | Ieper, Belgium
Cinquieme Sens Northern Europe | Amsterdam, The Netherlands
CIS Pharma AG | Bubendorf, Switzerland
Claro Products GmbH | Anif, Austria
CLR – Chemisches Laboratorium Dr. Kurt Richter GmbH | Berlin, Germany
Connect Chemicals Benelux B.V. | Dordrecht, The Netherlands
Cosmetic Service GmbH | Eppertshausen, Germany
Cosmotrade GmbH | Bergkirchen, Germany
CosTec B.V. | Haaften, The Netherlands
Cosun Biobased Products B.V. | Dinteloord, The Netherlands
CPL Aromas GmbH | Bielefeld, Germany
CRL France | Écully, France
Croda GmbH | Nettetal, Germany

DAKO AG | Wiesentheid, Germany
Dalli-Werke GmbH & Co. KG | Stolberg, Germany
Dataphysics Instruments GmbH | Filderstadt, Germany
DeLaval NV | Gent, Belgium
Deuring GmbH & Co. KG | Hörbranz, Austria
DKSH Switzerland Ltd. | Zürich, Switzerland
Donauchem GmbH | Wien, Austria
Dr. Nüsken Chemie GmbH | Kamen, Germany
dreco Werke Wasch- und Körperpflegemittel GmbH Düsseldorf, Germany
Duesberg medical GmbH | Dorsten, Germany
Düllberg Konzentra GmbH & Co. KG | Hamburg, Germany
Düring AG | Dällikon, Switzerland

Eastman Chemical Company | Zwijnaarde, Belgium
Eco Point International BV | Halsteren, The Netherlands
ECSA CHEMICALS | Balerna, Switzerland
EHRLE GmbH | Dietenheim, Germany
Elkaderm GmbH | Haltern am See, Germany
EOC Group | Oudenaarde, Belgium
Esti Chem A/S | Gadstrup, Denmark
Evonik Treibacher GmbH | Althofen, Austria

Ferchem SA | Lugano, Switzerland
Fichtner Fine Ingredients S.L. | Granada, Spain
FINK TEC GmbH | Hamm, Germany
Flevo Chemie (Nederland) BV | Harderwijk, The Netherlands
Fraunhofer Institut für Angewandte Polymerforschung IAP Potsdam-Golm, Germany
Fraunhofer-IVV | Freising, Germany
Frey & Lau GmbH | Henstedt-Ulzburg, Germany
Frike Pharma AG | Mönchaltorf, Switzerland
FRIPOO Produkte AG | Grüningen, Switzerland

GETRA | Steyr, Austria
Givaudan Deutschland GmbH | Hamburg, Germany
GlaconChemie GmbH | Merseburg, Germany
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H. Reynaud & Fils (Deutschland) GmbH | Hamburg, Germany
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Hagleitner Hygiene International GmbH | Zell am See, Austria
HAKA Kunz GmbH | Waldenbuch, Germany
Halag Chemie AG | Aadorf, Switzerland
Handelmaatschappij A.Smit & Zoon B.V. LK Weesp, The Netherlands
HDS Chemie Handels Ges.m.b.H. | Wien, Austria
Henkel & Cie AG | Pratteln, Switzerland
Herbacin Cosmetic GmbH | Wutha-Farnroda, Germany
hollu Systemhygiene GmbH | Zirl, Austria
HOTTER GmbH | Waizenkirchen, Austria
Hydrior AG | Wettingen, Switzerland
HYGline GmbH | Wien, Austria

Iberchem S.A.U. | Alcantarilla, Murcia, Spain
IFF Fragrance GmbH | Hamburg, Germany
IMCD SEE GmbH | Wien, Austria
IMCD Switzerland AG | Zürich, Switzerland
Impag AG | Zürich, Switzerland
Inarco-Chemie GmbH | Zetzwil, Switzerland
Integrated Chemicals Specialties BV Nieuw-Vennep, The Netherlands
Interchim Austria GmbH | Wörgl, Austria
International Flavors & Fragrances I.F.F. (Deutschland) GmbH | Oberhausen, Germany

Johann Vögele KG | Lauffen a. Neckar, Germany
Jüstrich Cosmetics AG | Berneck, Switzerland

Kaneka Europe Holding Company nv | Zaventem, Belgium

KAO Chemicals GmbH | Emmerich am Rhein, Germany
Kemetyl Professional B.V. | Soest, The Netherlands
KHK GmbH | Hürth, Germany
Koch-Chemie GmbH | Unna, Germany
Kolb Distribution Ltd. | Hedingen, Switzerland
Kopetzky & Moritz KG | Piesendorf, Austria
KRAHN Central & Eastern Europe GmbH | Wien, Austria
Kurt Obermeier GmbH & Co.KG | Bad Berleburg, Germany

Laboratorium Buchrucker Hygiene GmbH | Ottensheim, Austria
Lactipar SA | Obernau, Switzerland
LEHVOSS Schneider AG | Winterthur -Seuzach, Switzerland
Lenzing AG | Lenzing, Austria
Lobeck Chemie AG | St. Gallen, Switzerland
Lonza Benelux B.V. | Breda (Noord-Brabant), The Netherlands
Lucridis Distribution AG | Zürich, Switzerland
LUZI AG | Dietlikon, Switzerland

Matco Belgium nv | Waregem, Belgium
Merisa AG | Hergiswil, Switzerland
Mibelle Group | Frenkendorf, Switzerland
Mico AB | Ängelholm, Sweden
Miele & Cie. KG | Gütersloh, Germany
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Nordmann Switzerland AG | Zürich, Switzerland
Nwl Netherlands Production BV | HB Hillegom, The Netherlands

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Oqema AG | Birsfelden, Switzerland
OQEMA GmbH | Wien, Austria

PCC Exol SA | Brzeg Dolny, Poland
Permcos GmbH | Stein AG, Switzerland
PERNAUER Chemiewerke GmbH | Wels, Austria
Pointner & Rothschädl Ges.m.b.H. | Salzburg, Austria
Polygon Chemie AG | Olten, Switzerland
PQ Silicas B.V. | ZG Eysden, The Netherlands
Prayon S.A. | Engis, Belgium
Procter & Gamble Service GmbH | Schwalbach, Germany

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RAHN GmbH | Frankfurt, Germany
Rala Hygiene GmbH | Schlins, Austria
Ravago Chemicals The Netherlands BV
Hoofddorp, The Netherlands
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Ringana GmbH | Sankt Johann i.d. Haide, Austria
Riwax-Chemie AG | Zollikofen, Switzerland
Roquette GmbH | Frankfurt, Germany

Salinen Austria Aktiengesellschaft
Ebensee am Traunsee, Austria
Sasol Germany GmbH | Marl, Germany
Savonnerie Vandeputte S.A. | Mouscron, Belgium
Schärer & Schläpfer AG | Rothrist, Switzerland
SCS-TECHNOLOGY Verfahrenstechnik | Linz, Austria
Sebapharma GmbH & Co. KG | Boppard, Germany
Seeger Wasch- und Reinigungsmittel GmbH
Balingen, Germany
Seifenfabrik Strohmeier GmbH | Judenburg, Austria
Seitz GmbH | Kriftel am Taunus, Germany
Servophil AG | Hünenberg, Switzerland
SGS Institut Fresenius GmbH | Hamburg, Germany
Silkem Vertriebs AG | Baar, Switzerland
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Sopura | Seneffe, Belgium
SOREIN-Fabrik GmbH | Pfäffikon / ZH, Switzerland
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Swissatest Testmaterialien AG | St.Gallen, Switzerland

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WIGOL W. Stache GmbH | Worms, Germany
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Landesinnung Chemischen Gewerbe | St. Pölten, Austria

Z & S Handel AG | Kloten, Switzerland
Zschimmer & Schwarz GmbH & Co KG | Lahnstein, Germany

7.2. Sustaining Members

BASF SE | Ludwigshafen, Germany
Biesterfeld Spezialchemie GmbH | Hamburg, Germany
Brenntag Holding GmbH | Essen, Germany
BTC Europe GmbH | Berlin, Germany
BYK-Chemie GmbH | Wesel, Germany
Chemspeed Technologies AG | Füllinsdorf, Switzerland
CHT Germany GmbH | Tübingen, Germany
Clariant International Ltd | Muttenz, Switzerland
Clariant SE | Sulzbach, Germany
Cosun Biobased Experts | Dinteloord, The Netherlands
Covestro Deutschland AG | Leverkusen, Germany
Dow Silicones Belgium SRL | Seneffe, Belgium
Evonik Operations GmbH | Marl, Germany
Genencor International BV – IFF Health & Biosciences
Leiden, The Netherlands
Harke Chemicals GmbH | Mülheim an der Ruhr, Germany
IMCD Deutschland GmbH | Köln, Germany
IMPAG Import GmbH | Offenbach, Germany
Innospec Ltd | Cheshire, UK
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Julius Hoesch GmbH & Co KG | Düren, Germany
KLK OLEO (Kolb Distribution Ltd.) | Hedingen, Switzerland
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LANXESS Deutschland GmbH | Köln, Germany
Nordmann, Rassmann GmbH | Hamburg, Germany
Nouryon Surface Chemistry AB | Stenungsund, Sweden
novoclon GmbH | Düsseldorf, Germany
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OQEMA GmbH | Mönchengladbach, Germany
Polygon Chemie AG | Olten, Switzerland
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Safic-Alcan Deutschland GmbH | Bad Kreuznach, Germany
Sasol Germany GmbH | Hamburg, Germany
Schill + Seilacher GmbH | Böblingen, Germany
Seppic GmbH | Köln, Germany
Shandong Taihe Water Treatment Technologies Co., Ltd.
Zaozhuang City, Shandong Province, China
SLI Chemicals GmbH | Frankfurt am Main, Germany
SOFW – Verlag für chemische Industrie,
H. Ziolkowsky GmbH | Thannhausen, Germany
Unger Fabrikker A.S | Fredrikstad, Norway
Worlée-Chemie GmbH | Hamburg, Germany

7.3. Become a Member!

Through your affiliation, you get the chance to actively shape the future of the detergents/cleansers, cosmetics and perfumery industry. SEPAWA® e.V. offers individuals as well as SMEs and big cooperations the chance to get on board with one of the following membership options:

You need further information before deciding for a membership? Contact us!

We are happy to help you!

Franziska Konle
Mail: office@sepawa.de
Tel: +49 8281 79940-28

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€ 2,500 / Year

SEPAWA® e.V. in Numbers
(incl. sections)

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234
Corporative & Sustaining Members

6
Specialist Groups

4
Sections

8. Event Calendar 2024

Event	Date	Location	Topics
Specialist Group (SG) Innovative Cleaning (IR)	21 – 22 February 2024	Düren	Sustainability versus Convenience
Section Austria	09 – 10 April 2024	Anif near Salzburg	Microplastics, probiotics, regulation – and what else is on your mind?
SG Legislative – Environment – Consumer (LUV)	22 – 23 April 2024	Dessau	Water-soluble, synthetic polymers
German Association of Perfumers in SEPAWA® e.V. (DGP)	25 – 26 April 2024	Prague	Raw materials, regulatory and marketing
SG Cosmetic Applications and Technologies (CAT)	15 – 16 May 2024	Nuremberg	Lecture Event
SG Professional Cleaning and Care (PRP)	03 – 04 June 2024	Konstanz	Dish-washing, Laundry-washing, Green-washing – What will professional cleaning look like in the future?
SG Raw Materials and Processes (R&P)	13 September 2024	Essen	Lecture Event
Section Switzerland	13 September 2024	TBA	Lecture Event
SEPAWA® CONGRESS	16 – 18 October 2024	Berlin	Home Care, Personal Care, Flavor & Fragrance, Sustainability, Packaging
Sections Benelux and Nordic	Date and location TBA	Latest updates at:	www.sepawa.com/en/upcoming-events/

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16–18 OCTOBER 2024

SEPAWA® CONGRESS

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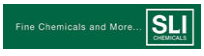
save the date

We would like to thank all our Sustaining Members for supporting the goals of SEPAWA® e.V.



As of December 2023.