

	ROWA GROUP	> 02 Congratulations: Success all along the line > 02 Roast in Peace: Into the working day with Frohnatur!							
Z	ROMIRA	> 03 ROMITRON® PPS: Climbing up the Polymers Pyramid > 04 ROMILOY® exhibits high material resistance							
		> 05 Safe charging with ROMIRA: ROMILOY <sup>®</sup> PC+ASA for wallboxes							
_	ROWASOL	> 05 First gravimetric gear pump in the portfolio							
Z	<b>ROWA MASTERBATCH</b>	> 06 Improving recycling: Color NIR detectable masterbatches added to the ROWA Masterbatch portfolio							
		> 06 New black masterbatch from ROWA Masterbatch > 07 Network with a future: ROWA Masterbatch now a MINUTEX partner							
0	TRAMACO	> 07 TRASTATIC GMS 25 – cell stabilizer and antistatic agent							
0	ROWA LACK	> 08 More room for the essentials: Warehouse expansion at ROWA Lack > 08 Change in management at ROWA Lack							















Kai Müller CEO ROWA GROUP

Dear Business Partners, dear Ladies and Gentlemen,

In this, the second year of the pandemic, our industry is still being confronted with similar challenges to those we faced in 2020. While we have learned to manage this situation, and despite the fact that the general feeling in the European plastics industry is positive at the moment, operations continue to be characterized by a tight supply situation and persistently high material costs. So as to continue to be a reliable partner for our customers, the companies of the ROWA GROUP have been adjusting their inventories for several months in order for us to be able to supply customers quickly, flexibly and within acceptable delivery times.

Following an initial period of shock in the spring of 2020, I am delighted to report that our companies are now doing so well that we are able to operate almost "back to normal". This is largely due to our dedicated employees, particularly our sales team, who have maintained personal contact with our regular customers even during restricted times. Providing this high level of personal service and support is firmly rooted in our DNA.

Which is why we are especially looking forward to Fakuma, this will be the first in-person trade show of this size and will give us the opportunity once again to share ideas and experiences. And, we will finally be able to show our usual hospitality at our booth in Hall B1 and personally present the new and further developments of our portfolio.

For instance, ROMILOY<sup>®</sup> compounds, which we have tested for resistance to disinfectants. ROWASOL's first gravimetric gear pump is an impressive new development that significantly increases the precision of concentrate delivery and minimizes waste. Also, the ROWA Masterbatch team have been using their expertise over many years now to ensure that the recycling of plastics is more efficient and less complicated. I wish you all an enjoyable read and look forward to seeing you at Fakuma!

### **ROWA GROUP**

#### Congratulations: SUCCESS ALL ALONG THE LINE

The ROWA GROUP warmly congratulates this year's trainees and is pleased that all trainees will remain part of the ROWA GROUP team.

EDU CA TION

Tolga Berrak has completed his three-year apprenticeship in the field of process mechanics specializing in plastics and rubber technology. Tolga will be supporting the ROWA Masterbatch team in the technical center in the future.

Our new colleagues Shady Tamer and Georg Ibrahim successfully completed their final examinations having each completed two years of training as production specialists in chemistry. Shady Tamer will be working in production at ROWA Masterbatch, Georg Ibrahim will continue his career at ROMIRA in quality assurance. We at ROWA GROUP would like to congratulate them on the successful completion of their apprenticeship and look forward to working with them in the future!

Special praise is particularly due to Shady Tamer and Georg Ibrahim, who only arrived in Germany shortly

before the start and, in addition to the theoretical and technical challenges of the apprenticeship, they also managed to successfully master the linguistic hurdles.

In August this year Maja Meyer and Tom Brehmer started their apprenticeship at the ROWA GROUP as industrial clerks and Seyman Tokay as process mechanic in the field of plastics and rubber technology - once again: welcome!

Apprentices are and shall remain an important element of the ROWA GROUP: We are pleased to already be receiving applications for the following occupations for 2022: Plant and machine operators, materials testers, process mechanics specializing in plastics and rubber technology, industrial clerks and production specialists in chemistry.

DIE FROHNATUR

DIE

### Roast in Peace: INTO THE WORKING DAY WITH FROHNATUR!

As of October, the ROWA GROUP will be starting off the day with an excellent cup of coffee.

Our new coffee machines will be stocked with Frohnatur filter coffee supplied by KAFFEEREI: a small coffee roasting company from our direct neighborhood. Frohnatur is a filter coffee from Guatemala that has distinctive notes of milk chocolate, walnut and cherry. KAFFEEREI operates under the motto "Roast in Peace" and sources green coffee from a variety of coffee-growing regions, it then processes it into filter coffee and espresso beans using the finest craftsmanship and a sensitive nose for coffee.

#### With best regards,

# K.L. 5

Your Kai Müller

# IMPRINT Published by ROWA GROUP Holding GmbH Siemensstraße 1-9 I 25421 Pinneberg V.i.S.d.P.: Kai Müller Edited by Menyesch Public Relations GmbH Grafic design foersterdesign.com Print Print & More Piffrement Gredits Unsplash: Nino Maghradze, Gilles-Rolland-Monnet, Charlotte Stowe, Marc Newberry, Robert Laursoor

We decided to work with the young team from KAFFEEREI in part because of their commitment to both sustainability - the coffee is supplied in a reusable 2kg container - as well as fair payment for the local coffee farmers. Plus,  $\notin 0.25$  of every kilogram of coffee sold is donated to a regional non-profit organization!

Anyone who is interested in buying the high-quality and lovingly roasted coffee or espresso for home can do so under **www.diekaffeerei.com.** 





#### 02 MROWANEWS





### **ROMITRON® PPS: CLIMBING UP THE POLYMERS PYRAMID**

Well known for their technical polymers and as a strong player offering polymeric materials total solutions, ROMIRA expands its product portfolio to High Performance Polymers (HPPs).

HPPs are generally classified as those polymers that have continuous service temperature exceeding 150 °C, along with superior mechanical and tribological properties and excellent chemical resistance. Examples are polysulfones, polyetherimide (PEI), polyether-ether ketone (PEEK), thermoplastic polyimide (TPI), polyphenylene sulfide (PPS), etc.

HPPs have a lot of industrial applications and are well spread in almost all key and expansive industries from automotive and aerospace to oil and gas and medical sectors. HPP Market is growing at a faster pace with substantial growth rates over the last years. The major growth drivers are improved performance, cost efratory and large-scale production. These advanced extruder lines enable ROMIRA to process a wide range of HPPs up to 450 °C. It is necessary to consider the special requirements for processing these polymers and the limitations of standard extrusion equipment. In addition to processing issues, there are matters of safety and economics. Furthermore, new development and processing technologists joined to ROMIRA with the aim of facilitating research and development process and to deal with possible technical issues.

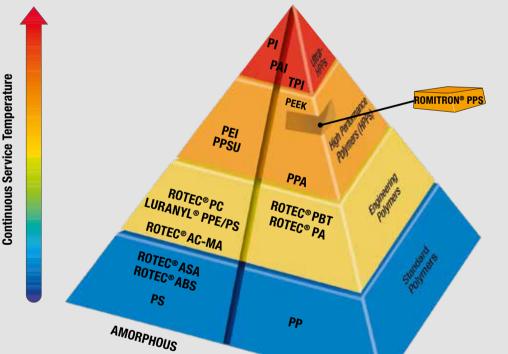
ROMIRA now adds PPS as the first high performance polymer to their very broad portfolio of engineering polymers families. ROMIRA offers standard grade PPS compounds filled by glass fibre and/or minerals under its own brand name "ROMITRON<sup>®</sup>". chemical resistance. This enables ROMITRON<sup>®</sup> compounds to be used effectively in harsh-environment applications, where other HPPs like high-heat polyamides do not exhibit desirable performance.

With its high service temperature and excellent chemical resistance, ROMITRON<sup>®</sup> compounds can be used in a variety of applications such as under-the-hood automotive parts, fuel and cooling parts, headlight parts, high heat connectors and plugs, electronics and many other applications.



New HPP experts joined to ROMIRA: Mr. Thomas Holzberg (Processing Technologist, left) and Dr. Mohammad Vaezi (R&D Manager))

#### ROMIRA CLIMBS UP THE POLYMERS PYRAMID



In addition to standard PPS compounds, R&D activities are conducted on PPS-based specialties and blends to develop new solutions and meet specific demands of the customers.



fectiveness, and lighter weight. As an example, these polymers are widely used in the automotive industry due to the continuing need for weight reduction, improved fuel efficiency, and more environmentally friendly attributes whilst enabling easier manufacture, faster assembly, and extended component life.

In order to respond to this growing market demand, ROMIRA develops further by adding new HPPs to their product portfolio. To this end, ROMIRA has been equipped with new high heat extruders for both laboROMITRON<sup>®</sup> PPS compounds possess superior advantages over existing engineering polymers. The main feature of ROMITRON<sup>®</sup> compounds is its higher heat resistance that makes it an ideal material choice for demanding applications. ROMITRON<sup>®</sup> PPS has longterm service temperature of 210 °C, while other technical polymers cannot withstand temperatures above 130 °C continuously.

In addition to heat resistance, ROMITRON<sup>®</sup> compounds have extremely low moisture absorption and excellent

Further information on the subject of "Coloring high-performance plastics" can be found at https://www.rowa-group.com/en/news ■







### **R** Disinfect without risk **ROMILOY® EXHIBITS HIGH MATERIAL RESISTANCE**

Since the start of the Corona pandemic, disinfecting plastic surfaces has become a continuous task in our daily lives, whether in shops, offices or our own homes. This has brought about the issue of stress cracking, which was previously mostly important in the medical sector, but has now become relevant for many ordinary items of daily use, such as shopping carts. ROMIRA has tested selected compounds for their material compatibility with disinfectants so that customers can be assured of the usual high quality in response to these new demands.

Plastics must be able to withstand a wide variety of different requirements, depending on where they are used. For disinfectants, these requirements include the user (layperson, specialist), the duration of application and the active ingredient (e.g. alcohols, aldehyde or ammonium compounds [Quats]). The standards DIN EN ISO 175 and DIN EN ISO 22088-3 are used to test the compatibility of plastic materials with media, in particular disinfectants.

A significant difference between the two tests is that in the DIN EN ISO 22088-3 measurement, the test bar is clamped with a defined bending. Moreover, the standard test time of 24 hours is shorter than that of DIN EN ISO 175, which is one week. And DIN EN ISO 22088-3 specifies the formation of stress cracks as a failure criterion, while DIN EN ISO 175 is based on a change in weight or mechanical tests.

ROMIRA has tested both ROMILOY<sup>®</sup> compounds 4010/07-1 UV and 5820 UV according to DIN EN ISO 175 and DIN EN ISO 22088-3. These two compounds

are used by our customers in the medical technology sector. The results of the test according to DIN EN ISO 175 are shown in Table 1.

After one week in the respective disinfectant, both ROMILOY<sup>®</sup> 4010/07-1 UV and ROMILOY<sup>®</sup> 5820 UV continue to exhibit more than 80 % of the original modulus of elasticity or notched impact strength and are consequently resistant.

The stress cracking resistance of the two compounds was determined according to DIN 22088-3 in addition to their general resistance. Even after 48 hours, twice the specified standard time, no stress cracks occurred in the material. The modulus of elasticity of the specimens tested according to DIN EN ISO 22088-3 was then determined (see Figure 1). As with the test according to DIN EN ISO 175, at least 80 % of the original modulus of elasticity remains. With its compounds, ROMIRA offers the best basis for a hygienically clean everyday life.

TABLE 1: E-MODULUS OF ELASTICITY AND NOTCHED IMPACT STRENGTH AFTER ONE WEEK IN THE RESPECTIVE DISINFECTANT

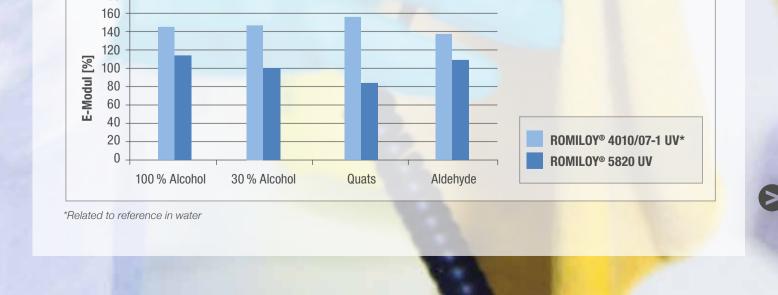
ACTIVE SUBSTANCE	ROMILOY® 4 Modulus of elasticity	010/07-1 UV* Notched impact strength	ROMILOY Modulus of elasticity	RESTISTANT? (>80 %)	
100 % alcohol	108 %	113 %	104 %	84 %	Yes
30 % alcohol	109 %	130 %	101 %	97 %	Yes
Aldehyde	111 %	123 %	99 %	91 %	Yes
Quats	111 %	129 %	106 %	96 %	Yes

\*Reference measured after one week in water

FIGURE 1: MODULUS OF ELASTICITY ACCORDING TO DIN EN ISO 22088-3 TEST

#### **MODULUS OF ELASTICITY RETAINED**

180 +



More information Dr. Lasse Finzel +49 4101 706 03 I.finzel@romira.de

#### 04 MROWANEWS





## News on e-mobility SAFE CHARGING WITH ROMIRA: ROMILOY® PC+ASA FOR WALLBOXES

The trend is continuing significantly: In 2020, more electric vehicles were registered worldwide than ever before, a record that is already certain to be broken in 2021. Meeting the growing demand requires that charging stations are not only available in public spaces, but that they are also made available to the end user. Wall charging stations - so-called wallboxes - are considered to be core technology for charging via the domestic power connection.

ROMIRA has been addressing the issue of private charging for a long time and has developed a product from the ROMILOY<sup>®</sup> PC+ASA range tailored to the specific demands.

which is a prerequisite for supplying energy to an electric vehicle in Europe.

ROMIRA is also currently conducting customized development work in this future-oriented field with the

One particular challenge in product development is the wide range of operating temperatures. Depending on the installation location - be it a garage or a protected outdoor area of the carport - the wallbox has to withstand temperatures ranging from -30 °C to 85 °C. A high level of impact strength and good weathering resistance are also required. The innovative, tailormade PC-ASA compound is able to satisfy all these points, and also meets REACH and RoHS requirements.

There is no risk of fire or other potential hazards such as electric shocks with ROMIRA compounds, which can be produced in black and white as well as in a variety of colors.

After all necessary requirements for the wallbox have been met, a CE marking will be issued for the wallbox, Since 24.11.2020, KFW, one of the world's leading development banks, has offered a subsidy program (grant 440) for the installation of wallboxes. The grant amounts to a flat rate of 900 euros per charging point. The following basic requirements must be met for this subsidy:

- ▷ Wallbox must have a charging capacity of 11 kW.
- The charging station must be permanently installed.
- The electricity for the wallbox must come exclusively from renewable energies.
- The charging station must be listed on a list for KfW eligible wallboxes.

aim of meeting the special requirements for wallboxes. If you would like to learn more please do not hesitate to contact us.



More information Markus Warzel +49 4101 706 03 m.warzel@romira.de

#### ROWASOL

#### FIRST GRAVIMETRIC GEAR PUMP IN THE PORTFOLIO

ROWASOL is expanding its ROWAMETRIC dosing system portfolio for liquid colors with a gravimetric gear pump from the manufacturer Micro Interface Design (MID). The main advantage of gear pumps is generally their ability to build up high pressures in a compact design. Thus, a pressure of up to 100 bar can also be generated with this system, which can be monitored by an optional pressure sensor at the pump outlet.

## ROWAMETRIC



a theoretical throughput calculation depending on the density of the color and the volume of the pump head. Any deviations in output are only detected downstream in the produced part. However, the new system works based on MID proprietary gravimetric control algorithm which adjusts the control parameters based on the mass of color leaving the container. In this way, significantly higher precision is achieved and waste is minimized. At the same time, the load cell, which is designed for a mass of up to 50 kg, also monitors the fill level, which can be visualized by means of an optionally available alarm signal light or transmitted as a signal to

quick-release couplings. The hose section between the container and the pump inlet serves as a color buffer.



New gear pump of the ROWAMETRIC dosing systems series

When using liquid colors in extrusion applications, pressure injection offers the possibility of dosing the color downstream, e.g. on the processing section of the extruder or even downstream in the melt pipe. In this way, extremely fast color changes can be produced.

Up to now, gear pump systems available from ROWA-SOL have relied on volumetric control of the output, i.e. The system can be equipped with three different pump heads with a wide spread for throughputs between 0.0018 and 63 l/h, which can be exchanged in just a few steps without tools for even faster color changes and maintenance work.

For a continuous production process, it is possible to switch temporarily, manually or automatically, to volumetric operation mode and, for example, to refill from a larger supply container via transfer pump. The container can also be changed "on the fly" thanks to the use of







#### ROWA 💷 MASTERBATCH



### Improving recycling **COLOR NIR DETECTABLE MASTERBATCHES ADDED TO THE ROWA MASTERBATCH PORTFOLIO**

There are obvious advantages to plastic: it is lightweight, comparatively easy to shape, versatile and durable. Yet it is precisely this durability that also poses the most significant disadvantage - disposal. ROWA Masterbatch is contributing to the ongoing optimization of the recycling economy with new product developments. Its portfolio not only includes black NIR detectable masterbatches, but also color NIR detectable masterbatches.

The ROWA Masterbatch team has been using its expertise to help make the recycling of plastics more efficient and simple, and not just since the current Packaging Act, which aims to increase the recycling rate of packaging waste, came into force in 2019. For instance, ROWALID<sup>®</sup>-IR, a solution that allows black and dark plastics to be recycled, has already been on offer since 2020. Up to now, sorting, which is carried out with NIR sensor technology and evaluates the reflected near-infrared spectrum, was found to be difficult due to the use of carbon black in dark plastics - the polymer-specific solution ROWALID®-IR facilitates detection of dark plastics during the sorting process.

Customers can now also take advantage of the following service: ROWA Masterbatch has a hand-sized NIR detector that measures in the wavelength range 900 nm to 1,700 nm. This allows the reflectance of the formulations to be checked, and the measured spectra can be provided to customers allowing them to assess whether the desired color setting is detectable. For questionable products, a preliminary quick assessment is made by checking how absorbent the formulations are. Where NIR detection proves difficult with existing products, ROWA Masterbatch, as a specialist in customer and polymer specific masterbatches, can offer alternative NIR detectable products.

Please contact us for more details on our processes, services and products.

**More information** Dr. Natalia Olichwer +49 4101 706 154 n.olichwer@rowa-masterbatch.de

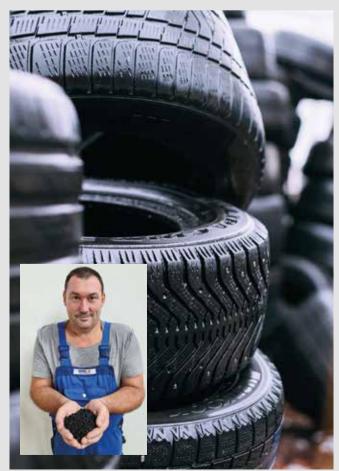


## **NEW BLACK MASTERBATCH FROM ROWA MASTERBATCH USING A SUSTAINABLE PA6** CARRIER MATERIAL AND RECYCLED CARBON BLACK

It is imperative that the plastics industry also participate in minimizing the use of fossil resources by closing material cycles in order to achieve the goals of the Paris Climate Agreement. ROWA Masterbatch intends to play an important role in this and is therefore successively expanding its portfolio to include increasingly more sustainable products. During the development of the ROWALID® Eco product range, emphasis was placed on the use of raw materials that significantly reduce carbon dioxide emissions (carbon footprint).

The ROWALID® EcoPA-B095A BLACK rCB masterbatch is a new product in this series. Its carrier material is based on high-quality post-industrial recycled polyamide. The colorant used is a recovered carbon black (rCB). A "green" substitute for industrial carbon black, this raw material gives plastics a black coloration, UV protection and opacity.

Recovered carbon black is obtained through the pyrolysis process: this is a thermal process in which used tires are heated up to between 250 and 750 °C



the development and production of polymer-specific color, additive and multifunctional masterbatches as well as specialty compounds for thermoplastics, is once again supplying a product that combines its own uncompromising quality standards with a firm commitment to greater sustainability, environmental protection and the careful use of resources.

<sup>[1]</sup>Source: https://www.kgk-rubberpoint.de/29968/recycling-vonreifen-zu-rcb-und-pyrolyseoel/

without the presence of oxygen and subsequently broken down into smaller molecules. This process typically produces a highly aromatic pyrolysis oil (approx. 45 %), crude pyrolysis carbon black (approx. 33 %), recycled steel (approx. 12%), and a non-condensable hydrocarbon gas (approx. 10%). By grinding and granulation, the crude pyrolysis carbon black can then be processed to recovered carbon black and further treated as required<sup>[1]</sup>.

The new black masterbatch is ideally suited for applications in automotive engineering, electronics and electrical engineering, construction, and sports and leisure products. ROWA Masterbatch, a specialist in





**More information Bernhard Scheffold** +49 4101 706 255 b.scheffold@rowa-masterbatch.de

#### 06 MROWANEWS

#### ROWA 🔍 MASTERBATCH



























MINUTEX is a network of RAS AG and funded by the Federal Ministry for Economic Affairs and Energy as well as by the ZIM (Zentrales Innovationsprogramm Mittelstand [Central Innovation Program for SMEs]), is dedicated to establishing an "innovation platform for technical textiles with regard to a reduced release of microplastics". ROWA Masterbatch has recently become part of this network.

As a MINUTEX partner, ROWA Masterbatch is working together with other members representing SMEs, industry and research to establish and market ecologically sustainable and economically sound solutions and product innovations. The objectives are not only to protect the environment, but also to strengthen competitiveness, to secure and create jobs and to actively participate in future market regulation. The network is able to combine knowledge on the formation, effects and avoidance of microplastics from technical textiles in such a way

that not only new products and processes with reduced microplastic content can be developed, but also arguments against non-targeted regulation can be presented in good time.

"Environmental pollution caused by microplastics is one of the major issues of our time. We are fully aware of the problem and the danger and wish to actively contribute to solutions", says Bernhard Scheffold, Managing Director of ROWA Masterbatch, commenting on becoming part of the MINUTEX network. For more information on MINUTEX, please visit minutex.de or contact ROWA Masterbatch.

**More information Bernhard Scheffold** +49 4101 706 255 b.scheffold@rowa-masterbatch.de

### **TRASTATIC GMS 25 – CELL STABILIZER AND ANTISTATIC AGENT**



In addition to the well-known TRACEL® foaming and nucleating agents TRAMACO develops and produces other additive concentrates, which are primarily optimized for foamed plastics but which are as well used for compact applications.

TRASTATIC GMS 25 is a cell stabilizer for polyolefins. When used as an additive in polyethylene- or polypropylene-foams it improves the rheology of the melt and by that provides an even cell structure and a better foam formation. The surface active substance of the TRASTATIC masterbatch stabilizes the gas bubbles formed during the foaming process. This effect becomes particularly apparent in physical foaming. While without additional stabilization the blowing gas diffuses faster out of the polymer matrix than the ambient air can diffuse into it, resulting in collapsing or at least shrinking foam, TRASTATIC controls the gas exchange, providing dimensional stability to the foam. Also chemical foaming processes can benefit from this effect.



ately after the processing and lasts for months.

Apart from TRASTATIC GMS 25 TRAMACO's portfolio offers additional cell stabilizers, antistatic batches and other functional additives.

Furthermore TRASTATIC GMS 25 is a very effective and fast antistatic agent, which reduces static charge of foams and also compact plastic products. Due to the fast migration of the active substance to the surface, the decrease of the surface resistance starts immedi-





### ROWALACK 🐠

## More room for the essentials: WAREHOUSE EXPANSION AT ROWA LACK

Owing to changing needs, it became necessary to adapt the production site of ROWA Lack in Seevetal. An expansion of the storage capacity in the hall was carried out during last year to suit the new requirements. The consumables and raw materials stored in the hall were temporarily moved out of storage to ensure that the conversion work could be carried out quickly.

Good planning and organization meant that there were no disruptions to the production process.



The work was completed and the warehouse filled after just one month. Through the redesign of the warehouse, an optimal arrangement of new heavy-duty racks was implemented, a warehouse office established and the storage area was increased by 20 %. As a result of the expansion, it is now possible to react even more flexibly to specific demand situations, meaning that a reliable workflow is possible in all aspects of order processing and production planning.

### CHANGE IN MANAGEMENT AT ROWA LACK

A new chapter in the company's long history began for ROWA Lack on July 01, 2021: After more than 22 years in the company, Helmut Völlinger handed over the managing director post to Dr. Robert Fichtler.

Mr. Völlinger will enter into a well-deserved retirement at the end of this year and until then will continue to support ROWA Lack with his extensive industry and technical knowledge. Helmut Völlinger had been Business Unit Manager since 2010 and was appointed Managing Director in June 2013.

He will be succeeded by Dr. Fichtler. Dr. Fichtler, who holds a doctorate in chemistry and joined the company in 2016, has been head of sales since 2018. Prior to joining ROWA Lack, he had already gained extensive experience in the lacquer sector over a number of years.

"Helmut Völlinger is handing over an intact, successful company. It is thanks to him that the name ROWA Lack is held in such high esteem. Maintaining this reputation and successfully shaping the future is our foremost objective", Dr. Fichtler commenting on the handover. Of course, the team at ROWA Lack will continue to give



top priority to working in partnership with customers and implementing its strengths in service and flexibility.

**More information** Dr. Robert Fichtler +49 4101 706 239 r.fichtler@rowa-lack.de

#### »INTERNAL«

#### **MOWA GROUP**



Technical Polymers and Blends ROWA COM Color, Additive and Multifunctional





#### DECEMBER 1. - 4. 2021, ISTANBUL

Experts from Europe and the Middle East in particular meet in Istanbul at the end of the year for professional exchange, the **ROMIRA** trade fair team included.



cial Lacquer Systems Top Coats, Pigment Preparations

ROWASOL

Liquid Colors and Dosing Systems

info@rowa-group.com +49 (0) 4101 706 06

rowa-group.com



#### MARCH 30. - 31. 2022, MANNHEIM, BOOTH 18

As a major partner to the automotive industry, **ROMIRA** will present the latest product solutions at the trade congress in Mannheim next spring.

	ROWA Masterbatch GmbH	TRAMACO GmbH	ROMIRA GmbH	ROWASOL GmbH	ROWA Lack GmbH	ROWA France S.a.r.L	ROWA Inc.	ROWA Korea Co., Ltd.	Ningbo ROWA Coatings
	Siemensstraße 1-3 25421 Pinneberg	Lise-Meitner-Allee 8 25436 Tornesch	Siemensstraße 1-3 25421 Pinneberg	Siemensstraße 1-5 25421 Pinneberg	Siemensstraße 1-5 25421 Pinneberg	7, rue Albert Einstein 77420 Champs sur Marne	110 Phyllis Dr Croydon, PA 19021 USA	Yesan Yeop Yesan-Gun, Chungnam-Do Phone: +82 41 335 42 03	Technology Co., Ltd Rm.1218, Block A2, R&D Park, Lane 587, Juxian Rd, Hi-Tech Zone, Ningbo City Zhejiang Province, P.R.China PC: 315048
	Phone: +49 4101 706 01 Fax: +49 4101 706 202 info@rowa-masterbatch.de	Fax: +49 4101 706 200 info@tramaco.de	Fax: +49 4101 706 300 info@romira.de	info@rowasol.de	info@rowa-lack.de	Phone: +33 1 646 81 616 Fax: +33 1 646 81 356 info@rowa-france.com	Phone: +1 609 567 8600 sales@rowainc.net www.rowainc.net		
www.	www.rowa-masterbatch.de	www.tramaco.de	www.romira.de	www.rowasol.de	www.rowa-lack.de				Phone: +86 574 87229282 info@rowa-china.com

www.rowa-lack.de

