

**Press release: Milestones of the Swabian measuring instrument manufacturer DataPhysics Instruments**

## **DataPhysics Instruments celebrates 25<sup>th</sup> anniversary**

**Filderstadt, 22.11.2022. Since August 1997, DataPhysics Instruments has been developing, manufacturing, and distributing laboratory measuring devices for the characterisation of interfaces and surfaces. From the beginning, the focus has been on the development of innovative and modular measuring instruments as well as user-friendly software. This product philosophy will remain at the core of the company.**

The laboratory measuring device manufacturer DataPhysics Instruments turns 25. Nils Langer, managing director, says: "This birthday is an important milestone for DataPhysics Instruments, especially after the challenges posed by the Coronavirus pandemic. Over the past 25 years, we have expanded our product portfolio steadily. In our anniversary year 2022, we have customers in over 80 countries and 45 employees. We are very well established in the worldwide market for measuring devices that characterise interfaces and surfaces. Now, it is our task to continue the company's successful path."

### **Modular design as founding principle**

DataPhysics Instruments was founded in August 1997 by Dr Ulrich Busch, Thorsten Holz, and Horst Rau. From the beginning, the company's laboratory measuring devices were modular in design. This enabled customers to configure their measuring devices according to their specific use cases. They were also able to analyse their data immediately after the measurement using the device's software. At the time, such a modular configuration was unheard of. To this day, the company has remained true to their commitment for a modular design.

With their measuring systems for the investigation of interfaces and surfaces, the three company founders had the finger on the pulse: in the 1990s, materials research made big strides. Examples include composites based on carbon fibres, but also other multicomponent materials for use in the construction and automotive industry, medical technology, as well as in electrical engineering. With the focus on new materials, the properties of their surfaces became crucial. The buzzword at the time was functionalised surfaces, i.e., surfaces optimised for their intended use with the help of surface structuring or various pre-treatments.

### **The product portfolio grows**

The company's first product was the OCA 20 optical contact angle meter together with the SCA analysis software, which were both developed in-house. Together, they could conduct contour measurements of pendant and sessile drops. In addition, the software could automatically evaluate the obtained data to calculate contact angle, surface tension, and surface energy. Founder and Managing Director Horst Rau recounts: "The first year and a half we concentrated on product development in order to be able to present our first, market-ready contact angle meter." At the Analytica trade fair in 1998, DataPhysics Instruments successfully presented its contact angle meter for the first time. Over the years, the company continued to expand its [OCA series](#), so that suitable solutions for many applications are now available, from an entry-level to an expert model.

Just in time for the turn of the millennium, DataPhysics Instruments expanded its product portfolio with the [force-based tensiometers of the DCAT series](#) and a newly developed software for the series. Through the years, the DCAT series has grown to contain different models, as well.

In 2002, a third device joined the product portfolio: the [SVT 20 spinning drop tensiometer](#), which can measure ultra-low interfacial tensions. Ten years later, DataPhysics Instruments launched the [humidity generators of the HGC series](#). They can be used to set and control the relative humidity within small and medium-sized measurement chambers. Since 2015, the [MultiScan MS 20 stability analysis system](#) has also been part of the product portfolio. It is used for the optical stability and ageing analysis of disperse multiphase mixtures.

### **Developing tomorrow's products today**

Today, DataPhysics Instruments is run by four shareholders: founder Horst Rau, Nils Langer, Jens Ole Wund and Dr Sebastian Schaubach. The interest in functionalised surfaces has only grown in importance over the past decades, as Managing Director and Sales Manager Nils Langer explains: “Today, research institutions and companies are developing more and more methods to functionalise surfaces. Plasma treatments and nanostructured surfaces are just two examples. It is therefore all the more important to provide researchers and product developers with measurement technology they can use to analyse the changed functional properties of such surfaces.”

For this reason, DataPhysics Instruments is focusing on the further upgrade of the existing devices as well as new developments. For the optical contact angle meters of the OCA series, the company introduced the new [dpiMAX software](#) at the beginning of 2022. The dpiMAX has a clearly structured, intuitive user interface and intelligent functions, which make the devices even easier to operate.

“We achieved another major success with the market launch of the [ZPA 20 zeta potential analyzer](#) with its patented measurement method,” adds Managing Director and Head of Development Jens Ole Wund. The ZPA 20 can determine the surface charge, or more precisely, the zeta potential of samples in aqueous solution by measuring the streaming current or streaming potential. To do this, it uses a patented measuring method, for which the solution is flowing over the sample alternately from opposite directions.

### **Shaping the future together**

Dr Sebastian Schaubach, Managing Director and responsible for innovation management, has a clear vision for the future: “We see ourselves as a partner who wants to refine the scientific analysis of interfaces and surfaces continually. In the future, our developments will therefore be conducted in even closer cooperation with our customers, because it is important to us that our devices can reliably solve our customers’ challenges.”

But it is not only the product portfolio that has grown steadily over the years. In its anniversary year, 45 employees work at DataPhysics Instruments. Further employees are being sought for the development, manufacturing, and sales department. In addition, the premises at the headquarters in Filderstadt near Stuttgart have steadily expanded. Recently, the in-house [Application Centre](#), with laboratory and training spaces, grew and was newly equipped. Dr Schaubach explains: “There, we offer test measurements for prospective buyers and contract measurements with all our devices. In addition, we conduct training courses for device operators.”

The company has always remained true to its location – and yet is at home all over the world. An international network of sales partners ensures that customers all over the world can receive advice locally and in their preferred language. To be better represented in some target markets, DataPhysics Instruments

founded its own companies in several countries: DataPhysics Instruments India was founded in 2020. In addition, the US subsidiary DataPhysics Instruments USA has existed since 2018.

Over the past 25 years, DataPhysics Instruments has developed an ever-expanding range of instruments for the analysis of interfaces and surfaces. At the same time, the company has grown in terms of personnel and space. For years, it has maintained a close relationship not only with sales partners around the world, but also with its customers in research and product development. These relationships have helped to develop market-driven products and to optimise the existing portfolio according to customer requirements. DataPhysics Instruments looks forward to expanding and deepening these relationships in the future.

**If this press release is reprinted, we will be pleased to receive a copy.**

#### **About DataPhysics Instruments GmbH**

DataPhysics Instruments GmbH, a German company with 25 years of experience, specialises in measurement technology for surface science. It offers a wide range of devices, which can analyse chemical and physical properties of surfaces and interfaces, such as the interfacial tension, surface energy, force of adhesion, static and dynamic contact angles, roughness profiles, zeta potential and dispersion stability. In short, its products help determining material properties whenever a liquid meets another liquid or a solid surface. The company's portfolio encompasses [contact angle measuring systems](#), [force](#) and [spinning drop tensiometers](#), [dispersion stability analysis systems](#), [surface profile analyzers](#), [humidity generators](#), and [zeta potential analyzers](#). Services include professional [contact measurements](#).

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# dataphysics

## Understanding Interfaces

Picture 1:  
The Swabian measuring instrument  
manufacturer DataPhysics Instruments  
turns 25.

Copyright: DataPhysics Instruments



Picture 2:  
The managing directors of DataPhysics  
Instruments (from left to right): Horst  
Rau, Nils Langer, Dr Sebastian  
Schaubach and Jens Ole Wund.

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Picture 3:  
The DataPhysics Instruments team has  
grown from seven to over 45  
employees in the last 25 years.

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