dataphysics Understanding Interfaces



DataPhysics Instruments Application & training centre





Welcome to the application & training centre of DataPhysics Instruments

High-end measuring systems for the analysis of physico-chemical properties of surfaces and interfaces are being developed and produced at DataPhysics Instruments for customers around the globe.

We invite you to get to know us at our head office in Filderstadt just a quick ten-minute drive from the Stuttgart airport.

Here we run a modern **application & training centre** where we will gladly demonstrate and explain all the measuring techniques we have to offer.

You can either come visit us in person and measure together with our experts or request a contract measurement. In our **extensively equipped laboratory** we quickly and professionally perform exactly the right measurements that you require.

Our interfacial science specialists

Our team has **more than 20 years of practical experience** in surface and interfacial measuring techniques. Hence, we can competently support our customers in science and industry to tackle their challenging application questions and advance their projects.

Since satisfied customers are our driving force, we strive to find the **proper solution that individually fits your needs**.

What does your applicative challenge look like? **Contact us** either via phone, email or our contact form. We are excited to discuss your projects with you.

In the following you will learn more about the range of services that we can provide.



Device range in our application centre

drop contour analysis systems of the OCA series

→ spinning drop video tensiometers of the SVT series

→ humidity generator and controller of the HGC series

→ dynamic contact angle measuring devices and

force tensiometers of the DCAT series

→ dispersion stability analysis system MS 20

→ zeta potential analyzer ZPA 25

→ surface profile analyzer SPA 25

→ optical contact angle measuring and

High temperature surface tension measurement with a DCAT 25

- → surface tension of liquids
- → interfacial tension between two liquids
- → static and dynamic contact angles
- → surface energy of solids
- → analysis of surface wettability
- → force of adhesion between liquids and surfaces
- → critical micelle formation concentration (CMC)
- → density of liquids and solids
- → sedimentation and penetration
- → surface pressure of monolayers & deposition with dip coater
- → stability and aging analysis of liquid dispersions
- → sedimentation and creaming rates
- and clustering
- → zeta potential of fibres, powders & plate shaped solid materials



Measurement of ultra-low interfacial tension with a SVT 25

Tailor-made solutions for various industries

→ ASTM D1331 → ISO 1409

→ ISO 4311

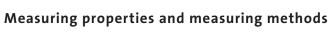
→ OECD 115 → DIN EN 14370

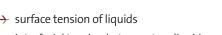
You can find a comprehensive list at: dataphysics-instruments.com/standards/

Measurements at the fringe of possibility

- → wetting analysis with high-speed cameras > 3000 frames/s
- → measurements at temperatures of -30 °C to 1800 °C
- → measurements at relative humidity ranging from 5% to 90%
- → measurements at pressures of 10⁻⁵ mbar to 750 bar
- → SFT/IFT measurements ranging from 10⁻⁶ mN/m to 2000 mN/m
- → surface profiles with height resolution of down to 0.1 nm

→ analysis of destabilisation mechanisms like particle merging











→ surface and interfacial rheology parameters

→ 3D surface profile analysis & roughness determination













Dispersion stability analysis with the MultiScan MS 20



→ ASTM D971 → ISO 304

→ ASTM D1417

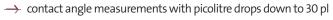
→ DIN 55660 → ISO 6295

→ DIN EN 14210 → ISO 6889













Contact

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Additional information and a contact form can be found on our website www.dataphysics-instruments.com

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