



German Plastics Center Product Quality · Training · Research · Certification



Become a partner

Advantages of becoming a partner include:

- Participation in the research advisory board
- Priority access to analytical services, training courses and seminars
- Access to a strong active network

Annual contribution fees:

Number of employees	1st year in €	subsequent years in €
1 - 10	1,000	500
11 - 25	2,000	1,000
26 - 50	4,000	2,000
51 - 100	6,000	3,000
101 - 250	10,000	5,000
251 - 500	15,000	7,500
501 - 1.000	20,000	10,000
> 1.000	25,000	12,500

Contact us to learn more about how to support the European Centre for Dispersion Technologies and to expand your network



Dr.-Ing. Felipe Wolff-Fabris

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Our main topics

Materials

Modification and optimisation of additives to improve dispersability and final properties of dispersions

- Synthesis of new functional fillers and additives
- Surface modification and functionalisation of particles
- Stabilisation of micro- and nano-dispersions

Process Engineering

Optimisation and development of new processes for particle synthesis and the production of dispersions

- · Top-Down and Bottom-Up processes
- Increase of the process energy efficiency
- Upscaling from lab to technical scale

Characterisation & Properties

Development and use of industry friendly analytical methods for reliable and cost efficient characterisation of particles, dispersions and final products

Training

Competent and independent further training and education as well as network-building in the field of dispersion technologies

- Close-to-practice training courses
- Industrial seminars
- Scientific conferences



SKZ - "THE ADDRESS"

when it comes to plastics.

Reliable partners at SKZ! The managing directors from left to right: Dr.-Ing. Peter Heidemeyer (Research), Robert Schmitt (Certification), Prof. Dr.-Ing. Martin Bastian (Chief Executive Officer), Dr.-Ing. Gerald Aengenheyster (Product Quality), Harald Huberth (Training)

As the largest plastics institute in Germany we offer practical solutions – tailored exactly to your requirements. For the past 50 years now we have seen ourselves as a partner to the plastics industry providing extensive system expertise:

By means of **Testing and Quality Assurance** we support your product policy, supplying you with valuable arguments for your key markets. With more than 10,000 participants each year, we are the market leader for **Training and the Transfer of Knowledge** in the field of plastics. Our **Research** division focuses on the development and improvement of production technologies in line with the market requirements. With the **Certification of Management Systems** we offer you the best prerequisite for efficiency and economic success.

Further SKZ services

(Advanced) Training Certification Expert Reports for Courts

On-site Analysis

Process Optimization Quality Assurance Research and Development Sustainability Material and Product Tests Third-Party Inspection

European Centre for Dispersion Technologies

SKZ – Das Kunststoff-Zentrum | Polymer Research and Development

Research & Development • Training • Analytics • Consulting • Networking



What are dispersions?

Modern materials are composed of a number of different constituents, and in most of the cases, these constituents are not soluble in each other. Such mixtures are described as dispersions, which include for example suspensions (solid domains in a liquid), emulsions (liquid domains in a liquid), composites (solid domains in a solid) and aerosols (liquid domains in a gas).

Dispersions are found in a variety of applications, such as:

- Plastic parts
- Paints and coatings
- Nanocomposites
- · Ceramics and porcelain
- Food and beverages
- Cosmetic products
- and many more ...

Not only the choice of the right components and formulation is essential for tailoring the final properties, but also the dispersion method plays an equally important role.

Partners and Location

The newly founded European Centre for Dispersion Technologies is currently under construction and will be an independent interdisciplinary research and technology transfer institution, in which R&D topics related to Dispersion Technologies as well as relevant services for the industry will be available.

The erection of this Centre is being funded by the SKZ German Plastics Centre and the Bavarian Ministry of Economic Affairs, Infrastructure, Transport and Technology, with strong support from the Bavarian Cluster Nanotechnology. Industrial companies also recognised the advantages of becoming partners of this new R&D Centre and are actively participating on its creation.





The new building will be located in the city of Selb, Germany.



We offer you

A competent interdisciplinary team and a variety of modern manufacturing and analytical methods will be available for R&D projects, training, analytical services and consulting.

Particle technology

- · Chemical facilities for particle synthesis and functionalisation
- · Plasma surface treatment
- · Thermal treatment and Calcination
- Freeze-drying

Dispersion

- · Planetary balls and cryogenic mill
- Dissolver and mixer
- Laboratory kneader
- Three roller mill
- Ultrasonic homogeniser
- · High pressure homogeniser

Analytics

- Zeta potential measurement
- Tensiometer (surface energy)
- · Dynamic light scattering
- · Gravity induced sedimentation
- · Laser diffraction system
- · BET surface area analyser
- Rheological and thermal analysis (DSC, DMA, DEA)
- FT-IR and EDX spectroscopy
- Optical and scanning electron microscopy
- Mechanical characterisation

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Yes, we want to receive more information about the European Centre for Dispersion Technologies and to learn how to become a partner

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