



German Plastics Institute

Short description:

As a long-standing competent provider of research services for the producers, processors and users of plastics we are in a position to competently answer material-related questions from the idea up to the product. With a staff of approx. 80 we are engaged in research and development.

We find intelligent solutions to problems of the plastics industry and work for your economic success.

Core competences in R&D:

- Analysis Department: characterization of complex polymer structures and polymer formulations by multidimensional and coupled chromatographic methods, spectroscopy, viscosimetry
- Chemistry Department: development and modification of technically complex, functional plastics and dispersions and of new polymerization techniques
- Physics Department: in-line ultrasonic measurements at extruders; measuring techniques for the observation of film forming and curing of lacquers and adhesives; physical characterization of plastics (e.g. mechanical-dynamic analysis, optical and electron microscopy, measurement of electrical properties, dielectric spectroscopy, scattering techniques)
- Technology: optimization of injection moulding and extrusion processes with respect to process and product properties and economic efficiency; development of

materials; investigations into simulating the long-term behaviour of plastics; studies concerning wear at plastics processing machines

Other interdisciplinary research areas of high current interest:

- hybrid materials
- functional polymers for optoelectronics, photonics and information technology
- combinatorial materials development and optimization
- in-line and on-line process control
- mesoscopic systems

Services:

- consulting
- materials and process development
- physical characterization
- chemical analysis
- mechanical testing
- sample preparation
- preproduction and small batch production
- damage analyses

Education and further training:

diploma dissertations and PhD theses in the above fields of research
lectures on plastics and practical training at Darmstadt University of Technology

Contact:

Deutsches Kunststoff-Institut
Schloßgartenstr. 6
64289 Darmstadt

Dr. Roy Wäber
Tel.: 06151-16-2104
Fax: 06151-29-2855
E-mail:

rwaeber@dki.tu-darmstadt.de
Web: www.dki.tu-darmstadt.de

