



GERMAN SOCIETY OF RHEOLOGY (DRG)

● Workshop of the German Rheological Society (DRG) and the ProcessNet Section “Rheology”: Rheology as a Key for Successful Product Design

The 2016 workshop of the German Rheological Society and the ProcessNet section “Rheology” at the Bundesanstalt für Materialforschung und -prüfung (BAM) in Berlin on March 14–15 went under the topic “Rheology as a key for a successful product design.”

The workshop was attended by 37 people and 23 contributions were submitted. The contributions did cover the whole variety of applications of rheology. The first session started directly with a very instructive overview from Saeid Kheirandish, Lanxess, Germany on the actual challenges in the production of the raw materials for tires, especially in regard of the filling materials. The next contribution from Wolfram Schmidt, BAM on the influences of hydration effects on the flow phenomena of concrete with admixtures showed in an impressive manner how the smallest molecular scales affect the flow of concrete on the macroscopic scale of several meters. Facilities that allow performing experiments on this scale are available at the BAM and it became clear during the talk that the rheology is indeed the key factor for the processability but also sustainability of concrete. The following talks of the morning sessions covered topics from polymer melts over coke suspensions up to bitumen. The afternoon session dealt mostly with biorheological questions, such as the Rheology of cells or blood. A talk on the defence mechanism of hagfish slime by Lukas Böni, ETH Zürich did not only resolve a fundamental scientific question but was due to the spe-

cific behavior of the hag fish also very entertaining. The afternoon session ended with the price ceremony of the price from the DRG for the best thesis in Rheology. The laureate was Patrick Alberto Rühls from ETH Zürich. After the price ceremony the laureate presented his thesis on “Interfacial Rheology and Processing of Amyloid Fibrils and Bacterial Biofilms” in a very instructive talk that showed the outstanding character of his thesis. After the meeting of the steering committee of the DRG and the council of the ProcessNet section, the evening ended with a buffet for all participants

The next morning session was devoted to rheometry and to polymers. In the second morning session a talk from Dietmar Auhl on 3-D printing showed how important rheological questions are in the evolving field of additive manufacturing. The following talks dealt with colloidal glasses, with the production of gelatine and the printing of solar cells. In the final afternoon session three talks on suspensions and new experimental approaches for their characterization were given. The workshop once again showed the broad spectrum that is covered by rheology. The combination of talks from industry and from academics and the high scientific level of all talks was highly appreciated by the attendees.

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Figure 1: The price ceremony with Ulrich Handge and Patrick Alberto Rühls.

This is an extract of the complete reprint-pdf, available at the Applied Rheology website <http://www.appliedrheology.org>



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