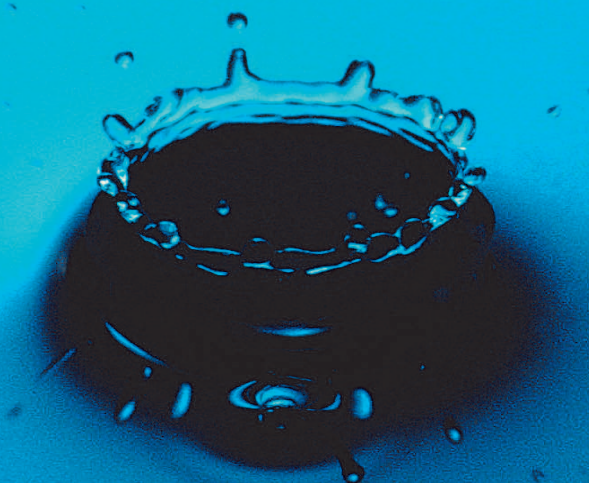


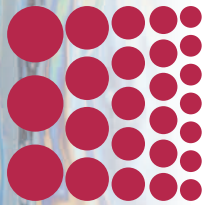
Applied Rheology

A COMPREHENSIVE JOURNAL FOR THE STUDY AND CHARACTERIZATION
OF THE FLOW OF COMPLEX AND TECHNOLOGICALLY IMPORTANT MATERIALS



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Applied Rheology is a peer-reviewed journal providing bimonthly articles and reviews covering complex and technologically important materials. The journal covers the science of soft matter deformation and flow, with a special interest in experimental or computational advances in the characterization of complex fluids.

Articles and reviews cover topics related to complex material structure and their dynamic or nonequilibrium character. Recent papers published in **Applied Rheology** have touched on a variety of topics, including phenomenological and molecular theories, instrumentation, surface chemistry, the study of diverse materials (such as polymers, rubber, paint, glass, foods, biological materials) — always with a view towards practical applications.

We aim to keep scientists in industry and academia up-to-date with the latest developments in applications in rheology. The articles and reviews are required reading for those working on state of the art material characterization.

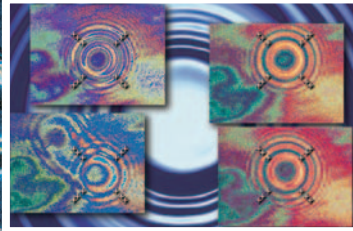
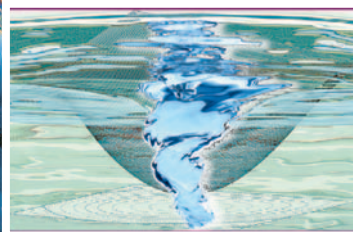
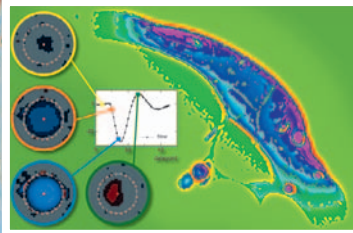
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Best regards

Peter Fischer & Martin Kröger



TEMPERATURE CALIBRATION OF ROTATIONAL RHEOMETERS WITH ELECTRICALLY HEATED TOOLS AND HOOD OVEN

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ABSTRACT
 The calibration of the temperature control unit of a rotational rheometer with a hood oven is shown. The calibration technique allows for a fast rheometer change or for the replacement of the hood oven with a hood oven of a different size. The temperature of the hood oven plate and the air flowing around the hood oven are measured independently. The temperature of the hood oven plate is measured by means of a thermocouple. The air temperature is measured by means of a thermocouple. The calibration procedure is optimized to keep the error in the temperature as small as possible.

INTRODUCTION
 Shear rheometry with polymer melts is a well-established technique. The main reason for this is the wide range of materials that can be studied with this technique. The main reason for this is the wide range of materials that can be studied with this technique. The main reason for this is the wide range of materials that can be studied with this technique.

EXPERIMENT
 In all rheometry measurements reported here, the rheometer was mounted on a thermocouple (TC) in a stainless steel tube with outer diameter 15 mm. The thermocouple (TC) was shielded with an open-wire mesh of outer diameter 15 mm. Both thermocouples were calibrated in a GPC 1000 temperature calibration chamber from MFLUX Calibration Technologies, Inc. The thermocouple (TC) was calibrated in a GPC 1000 temperature calibration chamber from MFLUX Calibration Technologies, Inc. The thermocouple (TC) was calibrated in a GPC 1000 temperature calibration chamber from MFLUX Calibration Technologies, Inc.

CONCLUSION
 The calibration of the temperature control unit of a rotational rheometer with a hood oven is shown. The calibration technique allows for a fast rheometer change or for the replacement of the hood oven with a hood oven of a different size. The temperature of the hood oven plate and the air flowing around the hood oven are measured independently. The temperature of the hood oven plate is measured by means of a thermocouple. The air temperature is measured by means of a thermocouple. The calibration procedure is optimized to keep the error in the temperature as small as possible.

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