

## 2003 Reference List – MCIK Application Support Desk

Ref	Title	Author
MCIK-Polym-001	Measurement of elongation viscosity of polymer melts under processing condition	H. Braun
MCIK-Polym-002	The impact of PE based Adhesive Resins and Other Thermoplastic Matrix on Mechanical Properties of Ground Rubber Tires-Thermoplastics Composites	S. Kim
MCIK-Polym-003	Viscosity Measurement of Novel Polymers and Additives using a Conical Twin-screw Compounder	S. Kim
MCIK-Ct-001	Rheological investigation of printing inks	
MCIK-Ct-002	Characterization of the curing behaviour of an epoxy prepreg by DOM	
MCIK-Ct-003	Rheological quality assurance of printing inks	
MCIK-Ct-004	Selecting optimum lithographic inks via rheological methods	
MCIK-Ct-005	Rheological characterization of plastisol inks	
MCIK-Ct-006	Comparison of commercial viscosity modifiers	
MCIK-Ct-007	PMMA (Acrylic)	
MCIK-Ct-008	Ink Rheology	
MCIK-CS-001	Viscosity Controlling Factors of Proanthocyanidin Polymers from Pinus radiata	S. Kim
MCIK-CS-002	Effect of Lyophilization of the Physical Characteristics of Medium Molecular Weight Hyaluronates	S. Kim
MCIK-CS-003	Rheological Characteristics of Extracts from Pinus radiata Bark - I. Rheological Behaviour of Water Soluble Extractive Fractions and Phlobaphenes	S. Kim
MCIK-CS-004	Rheological Characteristics of Extracts from Pinus radiata Bark - II. Viscoelastic Properties of Sequential Alkaline Extracts Based on Phenolic Acid Fraction	S. Kim
MCIK-CS-005	Influence of Viscosity Modifying Agents on Pinus radiata Extract	S. Kim
MCIK-CS-006	Effect of Urea on Molecular and Colloidal Aggregation of Proanthocyanidin Polymers from Pinus radiata	S. Kim
MCIK-CS-006	Effect of Ion-binding on the Formation of Temporary Viscoelastic Networks of Proanthocyanidin Biopolymer	S. Kim
MCIK-CS-007	Effect of Cation Interactions on Rheology and Sol-Gel Transition of Chitosan Solutions	S. Kim
MCIK-CS-008	Synergistic Effects and Mechanism of Coal/polypropylene Colliquation	S. Kim
MCIK-CS-009	Flow and stability of nonaqueous dispersions	S. Kim

## Electronics

Ref	Title	Author
Elec-001	The importance of paste rheology in improving fine line, thick film screen printing of front side metallization	
Elec-002	Rheology of lithographic inks	
Elec-003	RHEOLOGY AND MICROSTRUCTURE OF CONCENTRATED ZIRCONIA-ALUMINA SUSPENSIONS FOR GELCASTING COMPOSITES	
Elec-004	THE EFFECT OF POLYMERS ON CERAMIC SUSPENSION RHEOLOGY AND GREEN COMPONENT PROPERTIES	
Elec-005	Rheology of pastes used in MLCC & PDP industry	
Elec-006	Rheology of pastes used in coating electrodes in rechargeable batteries	

## Rheo Optics

Ref	Title	Author
RO-1	Monitoring of flow properties of a concentrated titanium dioxide suspension and microscopic observation of shear induced structures	Fredric Bar
RO-2	RheoScope and polarized light microscopy	Pierr Reinheimer
	RheoScope 1: The correlation between flow and structure	Pierr Reinheimer

RO-3	New experimental possibilities for the investigation of the melting of polymer blends	Pierr Reinheimer
RO-4	The RheoSizer Software: The ultimate tool for microstructure and rheology analysis Haake RheoScope – See the point in Rheology	J.M. Madiedo

## Extensional Rheology

Ref	Title	Author
CaBER-1	Measurement of extensional viscosity by stretching large liquid bridges in microgravity	
CaBER-2	Breakup of an Oldroyd Liquid Bridge as a Method for Testing the Rheological Properties of Polymer Solutions	
CaBER-3	CABER testing of candy	Spiegelberg
CaBER-4	The Capillary Breakup Extensional Rheometer (CABER™)	
CaBER-5	Effect of Fluid Relaxation Time of Dilute Polymer Solutions on Jet Break up due to a Forced Disturbance	Yenny Christanti, Lynn M. Walker
CaBER-6	Drop deformation in two –dimensional elongational flow	
CaBER-7	Effect of a spectrum of relaxation times on the capillary thinning of a filament of elastic liquid	
CaBER-8	Extensional Rheometry of Polymer Solutions and the Uniaxial Elongation of Viscoelastic Filaments	
CaBER-9	Extensional rheometry of polymeric fluids and the uniaxial elongation of viscoelastic filaments	
CaBER-10	FILAMENT STRETCHING RHEOMETRY AND THE EXTENSIONAL VISCOSITY OF DILUTE AND CONCENTRATED POLYMER SOLUTIONS	
CaBER-11	Extensional deformation, cohesive failure, and boundary conditions during sharkskin melt fracture	
CaBER-12	Thin filament dynamics during drop pinch-off in polyelectrolyte polymer solutions	
CaBER-13	Elasto-capillary thinning and breakup of model elastic liquids	Shelley L. Anna, Gareth H .McKinley
CaBER-14	How to Extract the Newtonian Viscosity from Capillary Breakup Measurements In a Filament Rheometer	Gareth H. McKinley, Anubhav Tripathi
CaBER-15	Influence of Viscoelasticity on the Atomization of Polymer Solutions	Yenny Christanti
CaBER-16	Capillary thinning of polymeric filaments	Mette Irene Kolte, Peter Szabo
CaBER-17	Local and Global Measures of the Stress Distribution in Abrupt Contraction-Expansions	Jonathan P. Rothstein, Gareth H. McKinley
CaBER-18	LIQUID STRETCHING USING A FALLING CYLINDER	JOSEPH E. MATTA, RAYMOND P. TYTUS
CaBER-19	A Technique for Characterizing Complex Polymer Solutions in Extensional Flows	Gavin Braithwaite, Stephen Spiegelberg
CaBER-20	Shear and Extensional Investigations in Solutions of Grafted/Ungrafted Amylopectin and Polyacrylamide	
CaBER-21	Shear and Extensional Rheological Investigations in Solutions of Grafted and Ungrafted Polysaccharides	
CaBER-22	Investigation of the elongational behavior of polymer solutions by means of an elongational rheometer	
CaBER-23	The Basics of Filament Stretching Rheometry	

CaBER-24	TRANSIENT SHEAR AND EXTENSIONAL RHEOLOGY OF DILUTE AND SEMI-DILUTE POLYMER SOLUTIONS	David Scott Shackelford, B. S.
CaBER-25	STUDYING THE EXTENSIONAL FLOW AND BREAKUP OF COMPLEX FLUIDS USING FILAMENT RHEOMETERS	
CaBER-26	Using filament stretching rheometry to predict strand formation and "processability" in adhesives and other non-Newtonian fluids	

## Cosmetic

Ref	Title	Author
V15E	Rheological Characteristics of Shaving Cream	Haake Rheology Team
V91-039E	Measuring and Interpreting the Rheological Properties of Cosmetic Products	Holland
V95-102E	Properties of a drag reduction micelle system	Myska, Stern
V95-126E	Colloids and Surfaces	Bradna, Stern
V97-137E	Yield Point Determination of Cosmetic Products with Controlled Stress Rheometers	Petri
V97-148E	Relations between Rheological and Sensory Characteristics of Cosmetic Emulsions	Stern et al.
V137E	Yield Point Determination of Cosmetic Products with Controlled Stress Rheometer	Petri
V148E	Relations between Rheological and Sensory Characteristics of Cosmetic Emulsions	Stern

## Pharma

Ref	Title	Author
V043E	The Rheological Characterization of Thixotropic Pharmaceutical Products	Holland
V050E	Rheological Measurements of Pharmaceutical Products – Moisturizing Milks	Holland.
V142E	Rheological Characterization of Tooth Paste	Kutschmann, Petri
V151E	Investigation of Cremes and Gel Products with the VT550	Kutschmann
V154E	Rheological Analysis of the Stability of Pharmaceutical Suspensions	Kutschmann
BSR2000-11	CORRELATION BETWEEN RHEOLOGY AND FLOW BIREFRINGENCE OF A VISCOELASTIC SOLUTION OF SURFACTANT	A. PONTON, J.P. DECROPPE
BSR2000-23	RHEOLOGICAL BEHAVIOUR OF DENTIFRICIES FORMULATIONS	
BSR2000-26	THIXOTROPICAL BEHAVIOUR OF GELLING AGENTS (CARBOPOL GELS) FOR THERAPEUTICAL APPLICATIONS	
ma283	Rheological behaviour of alkyl polyglucoside solutions	
V97-133E	Applied Rheology in the Field of Dental Applications	Eldam

## Food

Ref	Title	Author
V016E	Contribution to the Assessment of some Rheological Properties of Wheat Gluten	Thermo Haake Rheology Team
V033E	Dynamic Measurements of Jello	Holland
V035E	A Method for Monitoring Coagulation	Holland
V042E	Mozzarella Cheese, Elasticity, And Eating Pizza	Holland
V045E	Cappuccino In The Lab? Don't Disturb The Foam !	Thermo Haake Rheology Team
V051E	Measuring the Effect of Gels upon Mouth-Feel	Holland
V077E	The Viscoelastic Properties of Chewing Gum	Holland
V107E	Modified HP-Starches: Advantages in Manufacturing and Texture of Processed Food	Food
V108E	Wheat Fiber-A Natural Functional Ingredient	Food

V127E	Determining the yield point of food products	Petri
V132E	Monitoring flow properties of food gels	Eidam
V136E	Viscosity Measurements on Liquid Chocolate with the VT550	Kutschmann
V138E	Measurement of Butter – Complications and Possibilities	Christ
V141E	Applied Rheology in Food Technology	Eidam, Liehr
V172E	Texturizing Mayonnaise With Custom-Made Pectin Product	Thermo Haake Rheology Team
V187E	Rheological behavior of hydrogels in dependence on concentration of the polymer and type of neutralizing agent	Petri, S. Popovic, M. Zirkovic
BSR2000-01	EFFECT OF PLANT ENZYMES ON THE RHEOLOGY OF CASEIN SOLUTIONS.	SOLORZA- FERIA, J.
BSR2000-04	RHEOLOGICAL CHARACTERIZATION OF HONEY AND PROPOLIS MIXTURES	CLEBER COUTO DA COSTA
BSR2000-06	RHEOLOGICAL CHARACTERIZATION OF PROTEIN-POLYSACCHARIDE INTERACTIONS IN THE CONTINUOUS PHASE OF LIGHT SALAD DRESSINGS	G. VÉLEZ
BSR2000-12	LINEAR AND NON-LINEAR VISCOELASTICITY PROPERTIES OF VEGETABLE PROTEIN-STABILIZED EMULSIONS	C. GALLEGOS
BSR2000-15	INTERACTIONS BETWEEN POLYSACCHARIDES AND SURFACTANTS AND THE INFLUENCE ON THE RHEOLOGICAL PROPERTIES	MARIJA OBLONŠEK,
BSR2000-17	RHEOLOGICAL BEHAVIOUR OF SURFACTANT/WELAN/WATER SYSTEMS	S. MANCA
BSR2000-21	VISCOELASTIC BEHAVIOR OF WAXY MAIZE STARCH – GELLAN BLENDS UNDER SMALL AMPLITUDE OSCILLATORY SHEAR	RODRÍGUEZ- HERNÁNDEZ
JOR36-3-1	Linear viscoelastic behavior of commercial and model mayonnaise	Crispulo Gallegos
JOR39-6-1	Shear-thickening and flow-induced structure in a system of DMSO containing waxy maize starch	F. R. Dintzis
JOR39-6-2	Effects of thermomechanical processing on viscosity behavior of corn starches	F. R. Dintzis
V98E	Pump Maker Analyzes Flow Properties	Food Engineering
ma303	Modelisation of the evolution with shear of the droplet size distribution of oil-in-water emulsions	J.M. Madiedo and C. Gallegos
ma307	On the modelling of the linear relaxation spectrum of oil-in-water emulsions	J.M. Madiedo and C. Gallegos
ma315	Viscosity of sucrose palmitate aqueous systems	
ma329	Influence of temperature and polymer concentration on rheological properties of gellan gum in water solutions	Zupancic, Zumer
ma343	Rheo-mechanical properties of polysaccharide mixtures in water undergoing shear	U. Florjancic
ma375	Thermal induced sol-gel transition of egg yolk products	
ma409	Milk puddings without milk	M.C. Nunes
ma429	Effect of the addition of dried egg on the rheological and textural properties of a butter formulation	R. Baixauli
ma433	Influence of type, concentration and flow behaviour of hydrocolloid solutions on aroma perception	
ma441	Rheological properties of dextrans added to a butter formulation to enhance textural properties	R. Baixauli
ma453	Physical characterisation of commercial jams and marmalades	D. Lopes
ma465	Effect of temperature on time dependent behaviour of semisolid dairy desserts	
ma473	Rheological properties of egg yolk dispersions as a function of pH and ionic strength	
ma477	Influence of the addition of gellan gum on the rheology of low-calorie mayonnaise stabilised with modified starch	
ma481	Influence of the type of egg yolk on the rheological properties of the continuous phase of salad dressings	
ma485	Effect of the homogenisation speed on the rheological properties of low-oil content emulsions	
ma493	Influence of starch concentration on low-in-fat oil-in-water emulsions, stabilised by emulsifier blends	M.A. Riscardo
ma501	Flow behaviour of starch based food emulsion	
V129E	Experimental Influences on the Casson-Viscosity resp. Casson Yield Point at Chocolate Tests	Petri
BSR2000-18	INFLUENCE OF pH AND COMPOSITION ON THE THERMAL GELATION OF EGG PRODUCTS	J. MIRANDA

V50E	Rheological Measurements of Pharmaceutical Products – Moisturizing Milks	Holland.
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## Paint

Ref	Title	Author
V019E	Textile Printing Inks	Thermo Haake Rheology Team
V020E	The Results of a Water Based Paint	Thermo Haake Rheology Team
V025E	Flow Properties of Paint Pigment Suspensions	Holland
V031E	Judging Paint Flow Characteristics Relative to Application	Holland
V032E	Predicting the Shelf–Life of Particulate Solutions	Holland
V044E	Predicting the Flow Behavior of Spray Coating after Application	Holland
V071E	The Low Shear Flow Behavior of Latex Paint	Holland
V078E	Measuring the Stability of Paint Tinter	Holland
V116E	Comparison of Rheological Behavior of Suspensions	Y.Otsubo
V126E	Colloids and Surfaces	Bradna, Stern
V134E	Using paints – Application and Rheology	Eidam
V147E	Rheological Characterization of Paints for the Practician	Marquardt, Petri
V157E	Rheological Analysis of Powder Coatings	Kutschmann
V163E	UV Curing Characterization Using Rheology: Coatings	Cesar Gonzalez
BSR2000–03	RHEOLOGICAL INVESTIGATION OF SILICON AND TITANIUM OXIDE BASED GELS	A. PONTON
BSR2000–05	THE VISCOELASTIC PROPERTIES OF INDUSTRIAL REACTIVE PRINTING DYES	URŠKA FLORJANCIC
BSR2000–09	TIME DEPENDENT PROPERTIES OF CONCENTRATED FRIT SUSPENSIONS	FERNANDA ANDREOLA
BSR2000–10	THERMORHEOLOGICAL PROPERTIES OF MAGNETIC DISPERSIONS	BYEONG S. CHAE
BSR2000–13	THE EFFECT OF SHEAR ON THE STRUCTURAL EVOLUTION OF SILICA SOLS AND GELS	E. DRABAREK
BSR2000–14	RHEOLOGY OF CONCENTRATED AQUEOUS PTFE NANODISPERSIONS	ENRICO MARCHESE
BSR2000–20	NONLINEAR VISCOELASTICITY AND SHEAR THICKENING OF SUSPENSIONS FLOCCULATED BY REVERSIBLE BRIDGING	YASUFUMI OTSUBO
BSR2000–25	TRANSIENT BEHAVIOR OF CONCENTRATED SUSPENSIONS AFTER A STEPWISE CHANGE IN SHEAR DIRECTION	T.NARUMI
BSR2000–28	THIXOTROPIC BEHAVIOUR OF LAPONITE SUSPENSIONS AS STUDIED BY RHEO–OPTICAL TECHNIQUES	STÉPHANE COCARD
JOR41–3–1	Viscosity equation for concentrated suspensions of charged colloidal particles	A. Ogawa
JOR41–6–1	Testing the structure of magnetic paints with and without superimposed shear	Andrei A. Potanin
V96–134E	Using Paints – Application and Rheology	Eidam
Lr34–e	Determination of the Reactivity of Coating Powders with the HAAKE Comixer and the Software PolyView	
ma229	Zeta potential and rheological behaviour of aqueous kaolin suspensions dispersed with Sodium Hexametaphosphate	F. Andreola
ma245	Preshear effect on the viscoelasticity of coating color and the impact of the inhibitor on the structure of coating formulation	Haifa el–sadi
ma251	Rheology of pigment concentrates	R. Lapasin

## Polymer

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V040E	Elasticity and Effect Upon Mold–Filling	Holland
V041E	Tracking the Curing of Epoxy with a Rotational Viscometer	Holland
V058E	Estimating the Yield Stress from a Stress Ramp	Holland

V059E	The Measurement of Cure with Forced-Oscillation	Holland
V082E	Measuring Fast Curing Melts	Marquardt
V086E	Importance of Temperature Control During Curing Reactions	Holland
V087E	Measurement of the Viscoelastic Properties of Polymer Melts	Holland
V089E	Rheological Characterization of a Polystyrene Melt	Marquardt
V091E	Characterization of a Polyethylene Melt	Braun, Marquardt
V102E	Properties of a drag reduction micelle system	Myska, Stern
V103E	Molecular Weight Distribution Obtained From Rheological Experiments Using A New Analytical Inversion Schema	Braun, Friedrich, Fuchs
V104E	Molecular Weight Distribution Obtained From Rheology, Different Methods And Common Problems	Braun, Friedrich, Meier
V125E	Polymer Package for Thermo Haake Rheometers	Marquardt
V128E	Measurement of the viscoelastic properties of resins	Christ
V131E	Determination of molecular weight distribution from rheological experiments	Kutschmann
V139E	Rheological Characterization of Polymers	Christ
V150E	Rheological Methods for Determining Molecular Weight and Molecular Weight Distribution	Braun, Eckstein, Fuchs, Friedrich
V160E	Quality Control based on Rheological Molecular Weight Distribution Fingerprints	Braun
V169E	Rheological Investigation of three rubbers with different shore factors with respect to their shape stability before curing	Eidam, Liehr
V191E	Rheological tests on thermoplastic elastomers	Kutschmann
BSR2000-16	TRANSIENT FLOW BIREFRINGENCE OF A VISCOELASTIC SOLUTION IN SHEAR BANDING FLOW	JEAN-PAUL DECRUPPE
BSR2000-24	RHEO-OPTICAL BEHAVIOUR OF ASSOCIATING POLYMERS UNDER SHEAR FLOW	JEAN-FRANÇOIS LE MEINS
V93-062E	Characterizing Flow Regimes – Testing Sprayable PVC Plastics	Holland
V95-101E	Relaxation Time Spectra in Rheology: Calculation Examples	Weese, Friedrich
PPS509	BLENDS OF HIGH DENSITY POLYETHYLENE AND POLY (ETHYLENE TEREPHTHALATE )	
PPS496	Influence of PP-g-MAH Compatibilizer Characteristics on Interphase and Mechanical Properties of Glass Fiber Reinforced Polypropylene Composites	
PPS423	Selected Mechanical and Thermal Properties of PA/PP blends	
PPS413	Slip at Polymer-Polymer interfaces	
PPS410	Rheology, Structure and Properties of Silicate/Polyamide Nanocomposites	
PPS372	Relationships between steady-shear and dynamic state behaviour in PA-PE blends	
PPS362	Thermal Properties of Nylon 6/ABS Polymer Blends	
PPS355	Preparation, characterization and foaming process of biodegradable nanocomposites	
PPS336	Rheological behavior of multiwalled carbon nanotube/polycarbonate composites	
PPS311	Extrusion of zeolitic honeycomb structures using thermoplastic polymers as plasticising aid and binder	
PPS302	REAL-TIME MEASUREMENTS AND MODELING OF MICROSTRUCTURE IN BLOWN FILM EXTRUSION OF A LINEAR LOW-DENSITY POLYETHYLENE	
PPS279	A chemical model for the dispersion of fillers in a polymeric matrix	
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PPS154	Rheological Study of the influence of Branch Content on the Miscibility of octene m-LLDPE/LDPE and ZN-LLDPE/LDPE Blends	

PPS136	Correlation between rheological properties and morphology of blends of polystyrene with devulcanized SBR	
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PPS123	Relating Rheological Properties to Structure for Reactively Compatibilised PP/PBT Blends	
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PPS100	Polymer-Clay Nanocomposites Prepared by Power Ultrasonic Wave: Synthesis and Rheological Properties	
PPS060	Evolution of phase morphology of PA6/AES blends during processing at the melt state	
PPS046	Reactive Processing x Compatibilizer: A New Morphology is found for a Conducting Thermoplastic	
PPS023	Polymer Nanocomposite Foams by Using Supercritical CO	
PPS011	The effect of water, temperature and mechanical energy on maize starch structure	
Lr46-e	Conductivity Measurement for Rubber Compound Qualification	
Lr45-e	Determining Formulation and Predicting Processability of PIM Feedstock	
Lr44-e	Test methods for characterization and optimization of recycling polymers	
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Lr8-e	Differentiating Rubber Compounds with the same Mooney Viscosity	
Lr6-e	Investigation of the Flow Characteristics of PEPT at Different Temperatures	
Lr5-e	Investigation of the Influence of Two Types of Carbon Black on the Flow Behavior of SAN	
ma011	Phase inversion and melt elasticity of polymer blends	F.Prochazka
ma099	Rheological properties of PE/EPDM modified binders	
ma107	Flow behaviour of recycled polyethylene modified bitumens	
ma225	Critical changes in the rheological properties of PTFE dispersions	R. Lapasin

## Oil

Ref	Title	Author
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V117E	Rheology of Lubricating Greases: 1995 ELGI Annual Meeting	Steinbrüggen
V194E	Greases: rheological measurements in rotational mode	Thermo Haake
BSR2000-07	DETERMINATION OF THE THIXOTROPIC CONSTITUTIVE EQUATION FOR A WAXY CRUDE OIL	D C-H CHENG
BSR2000-08	BREAKUP IN CONCENTRATED OIL-IN-WATER EMULSIONS	K.M.B. JANSEN
BSR2000-27	THE INFLUENCE OF WATER QUALITY ON PROPERTIES OF DRAG REDUCING SURFACTANTS	J. MYSKA
JOR35-6-1	The measurement and description of the yielding behavior of waxy crude oil	L. T. Wardhaugh
ma095	Polyethylene modified bitumen	
ma103	Thermal susceptibility of ground tire rubber-modified bitumens	F. J. Navarro

## Powder Coating

Ref	Title	Author
V157E	Rheological Analysis of Powder Coatings	Kutschmann
MCIK-Ct-009	Rheological behaviour during phase separation induced by UV curing	
V99-163E	UV Curing characterization using rheology; Coatings	
MCIK-Ct-010	Rheological Characterization of UV Curing Gels	

## Adhesives

Ref	Title	Author
V018E	Rheology of Cigarette Glue	Thermo Haake Rheology Team
V026E	Normal Stress Measurement of Engineering Adhesives	Marquardt
V057E	Simulating the Slumping of Spray Sealants	Holland
V062E	Characterizing Flow Regimes – Testing Sprayable PVC Plastics	Holland
V076E	Rheological Test of PVC Samples with Ferrite Filler	Marquardt
V133E	Applied Rheology in the Field of Dental Applications	Eidam
V161E	Prediction of flow behavior in adhesive and sealant applications using different rheological measuring techniques	Liehr
V153E	Characterization of Pressure Sensitive Adhesives (PSA-Systems)	Eidam
V036E	The Processing of Hot Melt Glue	Holland

## Construction

Ref	Title	Author
V014E	Rheological Models for Gypsum Plaster Pastes	Thermo Haake Rheology Team
V164E	Characterization of Ceramics using Rheology	Cesar Gonzalez
V190E	Strategic Highway Research Program (SHRP) and the Measurement of Bitumen with the Thermo Haake Rheometers RW1 and RV1	Dr. Christ
BSR2000-02	INFLUENCE OF BLAST FURNACE SLAG ON THE RHEOLOGICAL PROPERTIES OF CEMENT PASTES	STEFANIA GRZESZCZYK
JOR40-4-1	Rheological characterization of Hanford neutralized current acid waste simulant slurries	C. Chang



# Flow and Microstructure of Dense Suspensions

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## Electro-Rheology (ER)

Ref	Title	Author
V099E	Creep behavior of electrorheological fluids	Otsubo, Edamura
V109E	The Influence of Cylinder Geometry in the Measurement of ER Fluids with Cylindrical Rotational Viscometers	Janocha, Bölder Rech
V114E	ER-Suspensions And Homogeneous ER Fluids	Janocha, Bölder
JOR38-6-2	Creep behavior of electrorheological fluids	Yasufumi Otsubo, Kazuya Edamura
JOR41-2-1 ER-Paper	Electrorheological effect in immiscible polymer blends A New Rheometer for the Characterization of ER Fluids	Kozo Tajiri Holland, Mq

## Rheological Methods

Ref	Title	Author
V001E	Predicting the Influence of Temperature upon Viscous Properties	Holland
V002E	Oscillating vane sensor measurements	
V004E	Introduction to Normal Stress	Nijman
V007E	Interpretation of Regression Analysis Data	Marquardt
V010E	Introduction to Elasticity	Haag
V012E	Normal Stress Measurements	Thermo Haake Rheology Team
V013E	The Yield Stress An Engineering Reality	Thermo Haake Rheology Team
V021E	A Method for Judging whether Slip Flow is Prevalent	Thermo Haake Rheology Team
V027E	Steady Shear Rheological Equations for a Parallel Plate Geometry	Marquardt
V028E	Viscosity Measurement in Accordance with ASTM D4287-88 with the Thermo Haake Viscotester VT500/VT501	Schreyer
V034E	Observing the Complete Viscoelastic Picture	Marquardt
V038E	Consideration of Viscous Heating	Holland

V047E	A General Introduction to the Theory of Forced Oscillation	Holland
V052E	A General Introduction to the Theory of Creep Testing	Holland
V053E	An Analytic Overview of Creep Testing	Holland
V061E	Experimental Errors Using Rotational Rheometers	Marquardt
V063E	Determination of the Zero Viscosity Using RheoStress RS100	Marquardt
V073E	What Is the Relationship Between Creep and Compliance Curves?	Holland
V075E	Determination of the Calculation Factors for Viscometers	Marquardt
V079E	Time–Temperature–Superposition	Marquardt
V084E	Determination of the Yield Point – VT550	Marquardt
V093E	Correction of the Air Bearing Friction	Marquardt
V098E	Pump Maker Analyzes Flow Properties	Food Engineering
V100E	Which Is More Critical–The Stress Or The Strain?	Holland
V101E	Relaxation Time Spectra in Rheology: Calculation Examples	Friedrich
V129E	Experimental Influences on the Casson–Viscosity resp.Casson Yield Point at Chocolate Tests	Petri
V140E	Measuring uncertainties at the VT550	Kutschmann
V143E	Getting best results from modern rotational rheometers: some inside information.	Marquardt
V156E	Yield Point Determination – a Critical Discussion of Different Methods	Kutschmann
V166E	How to select the most adequate sensor for your application	Cesar Gonzalez
V167E	Understanding the Temperature–Time–Relationship for Thermosetting Systems	Cesar Gonzalez
V173E	YIELD POINT MEASUREMENTS WITH MODERN CS RHEOMETER	Liehr
JOR38–6–1	Letter to the Editor: Which Is More Critical –The Stress Or The Strain?	David Holland
V056E	Rheology for predicting process performance	Holland
V072E	The Effect of Temperature upon Creep Curves	Holland

## Polymer Characterization and Processing Instruments Reports

Thermo Haake has a wide range of application reports covering polymer technology–related application issues.

Ref	Title
LR20e	Testing the Flow Properties of Acrylnitril–Butadien–Styrol–Terpolymer (ABS)
LR21e	Testing the Flow Behavior of two Batches of a Ceramic Injection Moulding Compound
LR22e	Application of the speed program for the differentiation of two natural rubber samples
LR23e	Application of the temperature program for the investigation of the gelling behavior of plastisols
LR24e	Influence of the incorporation sequence of different components of the same recipe on the energy consumption of the mixing process
LR26e	Testing the Behavior of Thermosetting Compounds with Respect to Flow and Rate of Cure Making Use of a Torque Rheometer
LR27e	Innovative Solutions for Polymer Processing and Characterization
LR28e	Compounding – Processing – Rheological Testing: All in one Test Run
LR29e	How to Relate Test Results of a Torque Rheometer to Problems in Elastomer Processing
LR30e	The Residual Current Operated Device and PolyLab ?
LR31e	OQT 512 – Applications when used with the blown–film and sheet, tape and ribbon take–off
LR32e	Optimizing mixer tests with the help of the worksheet technique
LR33e	Viscosity measurement of LDPE samples with the same MFI value
LR34e	Determination of the Reactivity of Coating Powders with the Thermo Haake Comixer and the Software PolyView
LR35e	Characterization of PVC–Compounds
LR36e	In–Process Measurement at–Line testing of 3 HDPE for determining film quality and simultaneous on–Line MFR/MVR monitoring
LR37e	Use of Modern PolyLab Torque Rheometer System for Material Characterization

LR38e	Production of a blend of two different concentrations by a parallel double screw extruder and a further processing through a melt pump and following measurement of the rheological characteristics in slot and rod capillary dies
LR40e	Kinetic Quality Control of Rubber Carbon Blacks the help of the worksheet technique
LR43e	MiniLab-Compounder and Reactor
LR44e	TEST METHODS FOR CHARACTERIZATION AND OPTIMIZATION OF RECYCLING POLYMERS
LR45e	Determining Formulation and Predicting Processability
LR46e	Conductivity Measurement for Rubber Compound Qualification
LR47e	Evaluation of an instrumented lab-scale extruder for melt extrusion
PPS011	The effect of water, temperature and mechanical energy on maize starch structure
PPS023	Polymer Nanocomposite Foams by Using Supercritical CO
PPS046	Reactive Processing x Compatibilizer: A New Morphology is found for a Conducting Thermoplastic
PPS060	Evolution of phase morphology of PA6/AES blends during processing at the melt state
PPS100	Polymer-Clay Nanocomposites Prepared by Power Ultrasonic Wave: Synthesis and Rheological Properties
PPS101	Correlation between the Evolution of EVA/PP TPV Morphology and the Crosslinking Reaction
PPS123	Relating Rheological Properties to Structure for Reactively Compatibilised PP/PBT Blends
PPS129	Effects of Composition, Processing Conditions and Reactive Compatibilization on the Mechanical Properties of PA6/AES Blends
PPS135	Morphology and Thermal Properties of Blends of PET and a LCP after Capillary Flow
PPS136	Correlation between rheological properties and morphology of blends of polystyrene with devulcanized SBR
PPS154	Rheological Study of the influence of Branch Content on the Miscibility of octene m-LLDPE/LDPE and ZN-LLDPE/LDPE Blends
PPS164	Effect of the Particle Character of PVC on Its Fusion Behavior
PPS185	Morphological Evolution During Processing of Compatibilized and Uncompatibilized PBT/ABS Blends
PPS217	Mixing and Diffusion of Plasticizer in Elastomers
PPS222	Effect of Processing History on the Sintering of Ethylene Copolymers
PPS225	Phase Inversion and Cocontinuity in Immiscible Polymer Blends
PPS243	Crystallization Behavior and Relaxation Processes in Basalt Fibers Reinforced Polypropylene
PPS276	Reactive doping of PAni-CSA and its use in conducting coatings
PPS277	Melt Blending of Polystyrene/Organoclay Nanocomposites
PPS279	A chemical model for the dispersion of fillers in a polymeric matrix
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PPS311	Extrusion of zeolitic honeycomb structures using thermoplastic polymers as plasticising aid and binder
PPS336	Rheological behavior of multiwalled carbon nanotube/polycarbonate composites
PPS355	Preparation, characterization and foaming process of biodegradable nanocomposites
PPS362	Thermal Properties of Nylon 6/ABS Polymer Blends
PPS372	Relationships between steady-shear and dynamic state behaviour in PA-PE blends
PPS410	Rheology, Structure and Properties of Silicate/Polyamide Nanocomposites
PPS413	Slip at Polymer-Polymer interfaces
PPS423	Selected Mechanical and Thermal Properties of PA/PP blends
PPS496	Influence of PP-g-MAH Compatibilizer Characteristics on Interphase and Mechanical Properties of Glass Fiber Reinforced Polypropylene Composites
PPS509	BLENDS OF HIGH DENSITY POLYETHYLENE AND POLY (ETHYLENE TEREPHTHALATE )

## Software

Ref	Title	Author
V048E	Making Routine Measurements Routine-Thermo Haake's Job Stream	Holland

V064E	Preset–Postset Function in the Thermo Haake Software	Marquardt
V092E	Hardware Requirements for Thermo Haake Software	Marquardt
V135E	Trouble Shooting Thermo Haake Rheometer Software	Marquardt
V170E	Installation of RheoWin Software Operation Note	Liehr
V171E	Setting up a measurement definition Software Operation Note	Liehr
V175E	Software RheoWin QC	Marquardt
V188E	Intelligent Software in Rheometry with Snapshot Technology	Marquardt
V189E	Intelligent Software in Rheometry with RheoWizard	Marquardt

## Instrumentation

Ref	Title	Author
V054E	What is a Controlled–Stress Rheometer?	Holland
V065E	Controlled Rate with Controlled Stress Rheometers	Marquardt
V068E	Double Cone Sensor System	Marquardt
V081E	Disposable Parallel–Plate Sensors	Marquardt
V085E	New Measuring Geometry to Extend the Application Range	Marquardt
V097E	Determination of Instrument Factors	Marquardt
V106E	The Torque Calibration Of A Controlled–Stress Rheometer	Nijman, Platzek
V110E	Pressure Sensor System D35/200 for Thermo Haake Rheometers	Thermo Haake
V111E	SHRP and the Measurement of Bitumen	Christ
V112E	Adjustment and Testing Tool for Thermo Haake Rheometers	Thermo Haake
V113E	Peltier Temperature Control System for Thermo Haake Rheometers	Thermo Haake
V145E	Viscometer–Viscosity DIN Standards	Marquardt
V146E	ISO–Viscometer–Viscosity Standards	Marquardt
V149E	ASTM Viscometer–Viscosity Standards	Marquardt
V168E	Innovative Measuring Concepts in Quality Control and Development: „Series 1“ Viscometer + Rheometer	Eidam
V176E	New Features with Series 1 Rheometers and RheoWin	Marquardt
V177E	Series 1 Accessories:Measuring system Z10	Marquardt
V178E	Series 1 Accessories:Measuring system Z40	Marquardt
V179E	Series 1 Accessories:Measuring Plate MP61	Marquardt
V180E	Series 1 Accessories:Measuring Plate Cover	Marquardt
V181E	Series 1 Accessories:Disposable Plate Holder	Marquardt
V182E	Series 1 Accessories:Sample protection cover	Marquardt
V183E	Series 1 Accessories:Solvent trap	Marquardt
V184E	Series 1 Accessories:Cone Heater TC1	Marquardt
JOR39–5–1	A new viscometer for rheological measurements on settling suspensions	B. Klein, J. S. Laskowski, and S. J. Partridge
Lr47–e	Evaluation of an instrumented lab–scale extruder for melt extrusion	
Lr43–e	MiniLab – Compounder and Reactor	
Lr37–e	Use of Modern PolyLab Torque Rheometer System for Material Characterization	
Lr31–e	OQT 512 – Applications when used with the blown–film and sheet, tape and ribbon take– off	
Lr30–e	The Residual Current Operated Device and PolyLab ?	
Lr7–e	Energy Calculaton in Mixers – Torque and Specific Mechanical Energy	
Lr4–e	Helpful Data for Tests with Extruder Sensors	
Lr3–e		
Lr2–e	Test Parameters for Mixer Tests	
Lr1–e	Establishing the Test Weight for Mixer Tests	
Lr32–e	Optimizing mixer tests with the help of the worksheet technique	

V93E Correction of the Air Bearing Friction  
V140E Measuring uncertainties at the VT550  
V166E How to select the most adequate sensor for your application

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