

Materials List for:

Challenges in Rheological Characterization of Highly Concentrated Suspensions — A Case Study for Screen-printing Silver Pastes

Ceren Yüce¹, Norbert Willenbacher¹

¹Applied Mechanics Group, Institute for Mechanical Process Engineering and Mechanics, Department of Chemical Engineering, Karlsruhe Institute of Technology

Correspondence to: Ceren Yüce at ceren.yuece@kit.edu, Norbert Willenbacher at norbert.willenbacher@kit.edu

URL: <https://www.jove.com/video/55377>

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Materials

Name	Company	Catalog Number	Comments
endoscopy	Visitool	TVS80.280.BF6.AD10.2	full name: TV-Endoskop, C-Mount, Variookular 2X, Ø 8 mm x ca. 280 mm, 0°, BF: 6 mm, AD 10 mm
commercial silver paste	Heraeus Deutschland GmbH & Co. KG Global Business Unit Heraeus Photovoltaics		
rheometer A	Anton Paar	Physica MCR 501	$R_q = 2 - 4 \mu\text{m}$
rheometer B	Thermo Scientific	Haake Mars II	$R_q = 1.15 \mu\text{m}$ $R_q = 9 \mu\text{m}$
rheometer C	Thermo Scientific (formerly Haake GmbH)	Rheostress 150	vane geometry
sandpaper	Jean Wirtz Düsseldorf Metallographie	P320 C	$R_q = 9 \mu\text{m}$ grain size = 46.2 ± 1.5
recording software	Debut Video Capture		
LED Spotlight	Kaleep	48W Led Work Lights Offroads Lights Lamp Spotlight Floodlight	
capillary breakup elongational rheometer	Thermo Scientific (Haake)	HAAKE CaBER1	
tensile tester	Stable Micro Systems, Godalming, UK	TA.XT plus Texture Analyzer	
50 N load cell	Stable Micro Systems, Godalming, UK	Serialnumber: 10256249	
a modified capillary rheometer	Göttfert Rheograph 2000 (Göttfert Werkstoff-Prüfmaschinen GmbH, Buchen Germany)		
500 bar pressure transducer	Gefran, Seligenstadt, Germany		