

The Nordic Rheology Society Conference 2007

STAVANGER, NORWAY

JUNE 13 – 15, 2007

Conference Report III

The 16th Nordic Rheology (Society) Conference was held during June 13 - 15, 2007 in Stavanger, Norway, the central point of the Norwegian oil industry. For the first time the conference was hosted by industry in Statoil's head office. The excellent quality of the lecture halls and lunch buffet at Statoil will be as much remembered by the delegates as the high quality of the rest of the conference.

The conference attracted 72 delegates, some 29 presentations and 12 posters, not to mention three internationally recognized guest speakers. The special theme of the conference was Emulsions and Suspensions, with contributions from people working with drilling fluids, foods, cement, polymers, pharmaceuticals, paint, pulp, etc. Truly the NRS annual conference is a forum for Rheologists working in many different fields.

Prior to the meeting the rheology course comprising of three lectures accompanied by an open discussion took place on 13th of June. Dr. Ahmadi Tehrani of MI Swaco and Dr. Richard Jachnik gave the delegates the foundation to build upon the topics discussed by the majority of the speakers, namely the rheology and behaviour of drilling fluids and its major components. Professor Gareth H. McKinley of Massachusetts Institute of Technology (MIT) then gave an interesting overview on extensional viscosity measurements. In the evening the reception at the University of Stavanger was closing the first day: the conference delegates were welcomed with a glass of champagne, nice buffet, and a review of the history of the University from the rector, Ivar Langen.

The conference was opened by the first plenary lecture given by Professor Gareth H. McKinley on the topic of "Rheological Fingerprinting of Complex Fluids using Large Amplitude Oscillatory Shear (LAOS) Flow". The lecture presented the delegates with an excellent overview of the possibilities with rheological fingerprinting for distinguishing complex fluids from one another. In particular, the audience was also fascinated by the work done at MIT on the rheology of snail slime. The session continued with a second keynote lecture given by Dr. Richard Jachnik of Baker Hughes Drilling Fluids who gave an interesting tour through some of the problems with current rheometers used in the oil industry. The third keynote lecture, given by Dr. Ahmadi Tehrani of MI Swaco, started after a refreshing coffee break. The talk continued the main topic of the rheology

course and presented the delegates with a deeper insight into the performance areas where fluid rheology of drilling fluids plays a dominant role. Dr. Peter Fischer of ETH Zurich then took us into the realm of protein-stabilized interfaces and their effect on the deformation behaviour of emulsion drops, before the parallel sessions were launched. The rest of the morning sessions were filled with presentations focusing on either "Materials with high Deborah numbers" or "Polymers and Food Applications". The afternoon session focused on "Instrumentation" and Dr. Jörg Läger of Anton Paar GmbH provided some useful insights on the validation of empirical rules for a standard polymer solution.

After a mixture of parallel and plenary sessions the delegates gathered in the harbour area of Stavanger for a scenic boat trip through the local fjord that took the delegates to the location of the conference dinner. After a 20 minute sail from Skagenkaien in Stavanger the party arrived at the blossoming garden *Flor og Fjære* on the island of Sør-Hidle, which was full of exotic plants and palm trees. Before settling down the party was welcomed with a guided tour through the garden, including a bit of helpful garden advice and inspiration. Several delegates also took the opportunity to go for a walk around the premises and to enjoy the sea views. The chef, André, then tempted the delegates with a menu comprising the best of local seafood. At the end of the dinner, the president of the NRS, Niall W. Young of Danisco A/S, emphasized the importance of the strong interaction with industry in this year's conference. Further he pointed out that both the Carl Klason or Young Rheologists Award was not given away this year. The delegates are therefore encouraged



© Appl. Rheol. 17 (2007) 301–302

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

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

Applied Rheology
Volume 17 · Issue 5

301

Conference Report III

to nominate candidates for next year's conference through the Society's website www.nordicrheology.org. Niall then rounded off the dinner with a Swedish joke, in other words by informing the delegates that the best way to model the rheological behaviour of drilling fluids is to use the "mud-ified" Herschel-Bulkley model.

The final day started with a session on fundamental research and industrial applications that involved CFD simulations, ultrasound Doppler based velocimetry and in-line rheometry, PIV and texture profile analysis, temperature control measurements etc. This session showed that new techniques and methods are now getting more and attention and that they may be an interesting complementary to the conventional viscometry and oscillatory tests. The course delegates were also given a chance to catch their breath, to network with each other under informal circumstances during the coffee and lunch breaks. Leading rheometer suppliers such as Anton Paar GmbH, JK LAB Instruments, Oleintec AB and TA Instruments took the opportunity to present the latest advances in instrumentation in the exhibition area connecting the lecture rooms.

The afternoon session started with the poster session and final oral session focusing on static and dynamic sagging, sedimentation problems in drilling fluids; problems that we all essentially face in our particular applications. Among the topics of

the annual business meeting of the Nordic Rheology Society next year's board election and an interesting open discussion about further expansion of the Society are to mention. As last year the Society made an award to the best presentation as judged by the Invited Speakers. This year the honour and distinction went to Victor Hugo Rolón-Garrido for his presentation "The Pom-Pom-Story: From Science Fiction to Reality". The NRS board was also pleased to announce that no less than five Students were presented with the student grants for attending the conference and holding either an oral presentation or poster presentations. Last but not least the conference organizers were then duly thanked for their hard work and efforts in running a successful conference.

The Nordic Rheology Society Annual Conference 2008 will be held in Copenhagen, Denmark between the dates of August 27-29. Further details will be posted on the NRS website throughout the coming year.

Johan Wiklund
SIK – The Swedish Institute for Food and
Biotechnology
Structure and Material Design
Box 5401
402 29 Göteborg, Sweden
Johan.wiklund@sik.se

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

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