Conference Report I

REVIEW OF NORDIC RHEOLOGY CONFERENCE 2003

TÓRSHAVN, FAROE ISLAND 15T – 3RD JUNE 2003

Delegates to the Annual Nordic Rheology Conference flocked to the Faroe Islands this year for a conference with the special topic of Suspensions and Emulsions. A broad cross section of rheology was on offer to the delegates with the dominating theme coming from the oil and petroleum industry.

The conference started with, the now customary rheology course on the 1st June. This took place in the University of the Faroe Islands faculty of science building and provided the forum for the invited speakers, Professor Henning Winter, Professor David Boger, Dr. Arild Saasen and Mr. Kevin Taylor to cover a range topics from, "A dialogue with linear viscoelasticity" through to "Drilling and well fluid rheology". The course, attended by some 32 delegates enjoyed some lively debate and questioning, with the invited speakers offering opinion and sparking comment amongst the delegates and themselves.

A reception for all delegates was held in the evening, after the course. This was a casual affair with wine and light snacks. The word was given to the rector of the University, Malan Maranersdóttir, to bid the delegates welcome.

The conference proper was started in the Radio House, as opposed to the planned Nordic House due to a strike on the islands. The Faroese Minister for Oil and the Environment, Eyfbun Eltør formally welcomed the Nordic Rheology Society to the islands and opened the conference.

Conference delegates in conversation over lunch at the Nordic House.



The conference's first talk was by the 'local' invited speaker, Dr. Arild Saasen of Statoil in Stavanger. He focused on the rheological consequences of environmental restrictions and occupational hygiene requirements while drilling off shore wells, which introduced the audience to the practical side of rheology. Flow properties really matter when there is health, environmental and not least to say large economic conditions to deal with. The session then continued on an oil based theme with presentations covering low shear rate rheology of drilling fluids, barite sag, foam rheology and non-Newtonian behaviour of fluids in the re-suspension of a drilled cuttings bed. Despite the obvious focus on the oil industry, the session chairman, Arild Saasen, made the salient point that the problems of barite sag are basically the same as those of creaming or sedimentation faced in the food industry, they just involve different materials and different units. Therefore there was something for everybody, if they simply jumped over the fence!

The lunch interrupted the flow of the talks, but when the afternoon session restarted Professor David Boger of University of Melbourne presented a talk on Environmental Rheology where disposal of waste material from mines was examined. This is a huge problem and can be largely solved by understanding the waste material and more importantly its rheology. By changing its chemistry one alters its rheology and therefore makes the material much easier to handle. It was a fine example of a talk that brought the multifaceted face of rheology together. The session continued with pneumatic conveying systems and drilling foam rheology before the final talk of the day, covering a critical look at the yield stress by the double act of 'Holmes and Watson'. This eased the delegates into the Society's Annual Members Meeting, which was conducted in an efficient manner. The evening arrangement allowed for a bus trip from the conference venue to the churches at Kirkjubøur, where the delegates enjoyed some clear Faroese weather, fine views and a packed evening meal.

The second day started with Professor Henning Winter of University of Massachusetts taking us through the process of breaking and healing of associative network polymers, before the session continued with a variety of presen-

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tations covering anything from polymer, food, instrumentation and petroleum rheology. The afternoon session, opened by Mr. Kevin Taylor, of Saudi Aramco, the Saudi Arabian Oil Company, returned to the oil theme with the rheology of hydrophobically associating polymers for oilfield applications. The rheology of drag reducers, gas assisted displacement on non-Newtonian fluids and temperature induced attractive forces between polystyrene particles in aqueous solutions of cellulose ethers was viscometrically described. This concluded the theoretical aspect of the conference and only left the conference dinner as an end to the official proceedings.

The conference dinner, situated overlooking Tórshavn, gave the delegates fine views of the Faroese nature, before the fog rolled in obscuring everything! During the dinner, the award for the best presentation was presented to Dr. Richard Ipsen from KVL, Denmark, for his presentation, "Nano-Structuring by means of Proteolysis: Rheology on novel gels from alphalactalbumin", co-authored by Jeanette Otte. Mr. Kevin Taylor then addressed the conference delegates on behalf of the invited speakers simply expressing thanks for the chance to have been

part of a very successful conference. The speeches were rounded up by a vote of thanks, which paid no small tribute to the huge efforts of Jóhannes Djurhus of the University of the Faroe Islands and Janet Johannesen of Atlanticon in organising the conference despite the restrictions that were placed on them by the strike on the islands. Such was the level of diligence and work that the delegates basically never knew a strike was taking place. Both were presented with a floral token of the gratitude of the Society for their efforts.

The conference for 2004 will take place in Iceland and will be held between the dates of 4th to 6th August, with the rheology course being 2nd and 3rd August. The NRS looks forward to welcoming you to Iceland.

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