

RHEOLOGY: A CROSS-DISCIPLINARY TECHNOLOGY EVOLVING TO TAKE ON NEW CHALLENGES (22ND NORDIC RHEOLOGY CONFERENCE)

COPENHAGEN, DENMARK
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In June 2013, Copenhagen University hosted the 22nd annual Nordic Rheology Conference (NRC), co-organized each year by the Nordic Rheology Society, as a platform for sharing knowledge, networking, and general discussion across its many scientific disciplines and research fields. Although Nordic by name, the NRC again welcomed a broad cross-section of academics and business representatives from around the world. Indeed, the nearly 120 participants represented 54 organizations from 18 different countries. Several industries were represented, including biotechnology, pharmaceutical, materials, and food.

The conference ran over three days, with the first day dedicated to a rheology course, allowing some participants to refresh their knowledge while also giving new rheologists the chance to learn the basics and be better prepared for the upcoming conference. This was a huge success, with almost 60 % of the conference participants also taking part in the course. During the course, the rheological border between liquids and solids was examined, being explained by some of the leading experts in the field. As the aim of the course was to elucidate the new techniques and interpret the results of the field, it quickly became apparent that the field of rheology is still rapidly evolving to encompass an ever-widening array of subjects. One representative example of this evolution is the application of rheological principles to solid-state substances under the title 'Shear Testing of Powders'. Finally, in the evening after the course during the NRC Welcome Reception all participants had the chance for short one-on-one discussions with leading rheology experts in the 'Science Dating' session lead by Biopeople.

The conference itself offered two parallel sessions, allowing participants to cherry-pick the talks they found most relevant to their individual area of interest. The talks were held under the themes: 'Polymer melts and solutions/Complex fluids and flows', 'Rheology for industrial processes', 'Powder rheology', 'Rheological methods and modeling', 'Rheology of food and biopolymers', and 'Rheology of pharmaceuticals'. In addition, four invited keynote speakers explained their individual fields of research: Ole Hassager from the Technical University of Denmark explained how extensional rheology may be used for characterizing polymer melts, Carl R. Wassgren Jr. from Purdue University talked about different methods for describing and characterizing powder flow, Erik van der Linden from Wageningen University gave a talk on fibril formation in food materials, and Thomas Rades from Copenhagen University discussed different distinct problems in pharmaceuticals, appealing to the audience to use their rheological expertise in solving some of them. The presentations and discussions at the conference were complemented by well-attended poster sessions.

During the conference the participants were invited to the traditional conference dinner, which this year was held at 'Festsalen' (directly translated as 'the party hall') of Copenhagen University. Here, the guests enjoyed a three-course dinner under beautiful paintings depicting the history of the host university. On the last day, the 'NRS Young Rheologist Award' was handed to Jukka Niskanen from Helsinki University for the extensive rheological work performed during his PhD research.

Conference Report I

Figure 1 (left):
Conference hall.

Figure 2 (right):
Presentations and discussions.

Figure 3
(next page, left above):
Audience.

Figure 4
(next page, right above):
Coffee break.

Figure 5
(next page, left below):
Poster session.

Figure 6
(next page, right below):
Conference dinner.





For more information on the 22nd NRC in Copenhagen, please visit the conference website at <http://nordicrheologysociety.org/2013/06/13/nrc-2013-is-well-attended>

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

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