

Non-Impact Printing Conference NIP27 in Minneapolis

Deinkability has Become Accepted as Necessary



City view of Minneapolis

About 500 participants coming for this year's NIP conference witnessed – among all the technical features of faster and better printing machines – that more and more, deinkability of the printed product now becomes a necessary feature when designing a printer. In the “Commercial Printing and Digital Packaging” session, Ricoh representatives introduced the RICOH Pro C901 dry toner printer (using chemical toner) which was launched in the late last year. In order to meet the demand for gloss, Ricoh has decided to add a UV varnish segment: “There are some styles of surface coating such as laminate and clear toner but the demand for UV varnish coating is the most popular because of low environmental burden or comparatively low cost.” After the presentation, chairman George Gibson's first question was about the deinkability of the UV varnish coating – probably having in mind that Xerox' clear toner fulfills this requirement. The answer to this question had to be postponed.

With customers also becoming

more and more aware of this issue, deinkability claims also tend to proliferate without evidence: So-called biotoners have become popular due to programs by authorities like the “Biopreferred” program by the USDA (United States Department of Agricul-

ture). It defines biobased products as “those that are composed wholly or significantly of biological ingredients – renewable resources, such as plant, animal, marine or forestry materials”. Without any evidence, in a presentation about “Biotoners: Technology, Ecology and Markets” it was claimed that biotoners are also better deinkable than conventional toners due to “their decomposition in the presence of water at elevated temperatures”.

The claim of better deinkability of biotoners was mentioned also by Anahita A. Williamson from Rochester Institute of Technology (USA) in a talk about “The Future of Toner: Life-Cycle Inventory, Impacts, and Environmental Technologies”. In the discussion, Axel Fischer of INGEDE explained that the deinkability of current conventional toners is already good enough that there is little room for improvement, especially as long as there is no proof. Biotoners may be marketed for their raw materials but not for better deinkability as this is clearly

...continued page 2

CALENDAR OF EVENTS

7 – 10 Nov 2011

4th Printing Future Days
Chemnitz, Germany

8 – 9 Nov 2011

Grenoble technical conference on deinking of digital prints
Grenoble, France

9 – 10 Nov 2011

European Paper Recycling Conference
Barcelona, Spain

9 – 11 Nov 2011

IMI Digital Print Week
19th European Inkjet Printing Conference
Lissabon, Portugal

14 – 17 Nov 2011

European Paper Week
Brussels, Belgium

28 – 29 Nov 2011

INGEDE Working Group
“Recovered Paper Management”
Ortmann, Germany

13 Dec 2011

INGEDE Project meeting 132 10
“Deinkability of recovered paper depending on water circuit quality”
Ortmann, Germany

In this issue:

DIP Quality Management Working Group Meeting

page 2



banner of conference sponsors

no issue in dry toners. Talking about “Recent Developments in the Deinking of Inkjet and Liquid Toner”, Fischer explained last year’s involuntary deinking trial with Indigo overprint leading to a significant damage in a member’s mill. He also concluded the current developments in better deinkable inkjet inks.

For Hewlett-Packard, Manoj Bhattacharyya presented new laboratory experiments on “Fatty Acid based Alkaline Deinking of Digital and Non-Digital Prints”. He found oleic acid “to be better

than all of the saturated fatty acids but still not good enough for LEP prints”. As an alternative he suggests erucic that in HP’s lab is said to perform as good as oleic acid in terms of yield and cost. Finally, Matthias Hausmann of Cewe Color (Germany) talked about the “Sustainability of the CEWE Photo-book”. “Taking care of deinking problems in recycling paper mills down the waste supply chain” for Hausmann is just one example in the total environmental evaluation of the production process.

Axel Fischer

DIP Quality Management Working Group Meeting



model view of the Holmen Paper Braviken mill

The latest meeting of the working group started at Noss AB in Norrköping. There we learned about

the different characteristics of wood fibres in every year ring and their suggested treatment in the

stock preparation system. Holmen Paper Braviken hosted the group on the following day. The program included presentations of the Holmen Group and the Braviken mill as well as a mill tour.

The working group discussed the issue of residual particles of varnishes which affect printability. A project to investigate the situation and to indicate solutions will be prepared.

For this project, INGEDE will also seek input and support from the producers and users of varnishes. Andreas Faul informed the group about the plans to intensify the discussion among the INGEDE members by using the logistics of the social network LinkedIn. Currently we run this within The INGEDE Board as a test phase. The minutes will contain more details about these items.

Andreas Faul