

Deinking Becomes Mainstream at NIP Conference

NIP28 \ UX %* \$ 'dfYgYbHhJcbgž9-13 Sep 2012 in Québec



Welcome banner at NIP 28 with INGEDE logo!

When INGEDE presented at the Non-Impact Printing Conference of the Society for Imaging Science and Technology (IS&T) for the first time, it felt quite strange to be the only one to want the ink off the paper. That was also the feeling many other participants might have had – some kind of a curiosity. Leading researchers of leading companies even said that this was no issue. That was 2005. In the meantime, deinking has become mainstream, a necessity. At NIP28 in Québec City in September 2012, already before the first conference day the very first tutorial of George Gibson (Xerox) about liquid toner already spent some slides with the issue of paper recycling and deinking, to be followed by Axel Fischer's tutorial on Paper Recycling and Deinking later with 12 very interested participants. Among the first of 160 scientific papers was a very well received technical presentation by Paul McConville, one of the developers of Xerox' waterless inkjet process for high speed printing. With illustrations from INGEDE's website he showed the advantages of this good deinkable process.

Next came a morning keynote by Hideo Shinada of Fujifilm Dimatix

(Japan), titled "Single Pass Inkjet Digital Printing Technology for Commercial Printing Market". He described the advantages of Fujifilm's JetPress 720 that jets pigmented ink into a still wet previously applied layer of a preconditioner, leading to a precipitation of a larger agglomerate on top of the paper and avoiding the bleeding of the ink into the fibres. The slide was illustrated with ERPC's Deinkability Score Color Scheme and a quote of INGEDE's Certificate for good deinkability.

Excitement but in a different way was created by the Landa show act, announced as afternoon keynote. With videos from Benny Landa's drupa theater, Gilad Tzori entertained the audience without presenting any technical detail of the process. This triggered an intense discussion revealing nothing more than the disappointment of the audience; also the question of Paul Fleming (Western Michigan University) about the deinkability of the process remained without a substantial answer.

Dennis Voss of PMV Darmstadt started the morning session about ...

see more on page 2

CALENDAR OF EVENTS

7-9 Nov 2012

IMI-Digital Printing Presses
Barcelona, Spain

13-16 Nov 2012

European Paper Week
Brussels, Belgium

27-28 Nov 2012

INGEDE working group
Paper for Recycling
Grand Couronne, France

28-29 Nov 2012

INGEDE working group
Deinking Process
Grand Couronne, France

13 Feb 2013

INGEDE Symposium
Munich, Germany

14 Feb 2013

INGEDE Communication Platform
Munich, Germany

14 Feb 2013

INGEDE General Assembly
Munich, Germany

In this issue:

EcoPrint Show in Berlin

page 2

“Environmental Sustainability” on the last day of NIP28 with a presentation about “Deinking of Recovered Paper Mixtures Containing Digital Prints—Challenges and Prospects”. As at the CTP conference in Grenoble in late 2011, he described PMV’s experiments with standard paper mixes containing different digitally printed papers. By definition of the ERPC Deinkability Score, only a single print product with its specific printing technology and ink-paper combination is evaluated – the PMV approach was to investigate how the mix in an industrial process can be simulated in the lab. The results are not surprising; one is that bleaching has only little effect on brightness, another that the dirt speck load increases with increasing percentage of LEP prints. The presentation perfectly laid the ground for a discussion on the presence and ne-

cessity of bleaching for different recycled paper grades as well as other technical basics of the process. Armed with the knowledge of Voss’ presentations and the subsequent discussions, some of the following presentations could be rated a lot easier. Compared to previous years, HP’s presence was reduced, with Laurie Mittelstadt speaking about “Deinking of Thermal Inkjet Newsprint”. Using HP’s special “HPES” deinking chemistry with ethoxylated fatty alcohol and ionic surfactant, at lab scale she found aluminum sulfate to improve filtrate darkening and ink elimination. Axel Fischer (INGEDE) presented good deinking results with resin inkjet inks by Sepiax on newsprint and last minute slides provided by Don Burns of Kodak about the Prosper Stream Inkjet technology achieving good deinkability with a new “Image Opti-

mizer Station”, applying a roll coating pre-treatment on the paper immediately before jetting the ink. Roland Gong, Ph. D. student with Paul Fleming at Western Michigan, finally introduced “a new image analysis approach to determine ink elimination using scanning high-resolution scanning image acquisition combined with innovation specimen preparation. Saturating white fiber in handsheets with water turns fiber translucent; hence, the trapped ink specks become visible through the entire thickness of the handsheet. Thus, it is possible to obtain extra and accurate speck information with the same image analysis settings. (...) More importantly, with a concept of ink elimination rate, it provides a reliable deinking predication compared with the limitations of the ERIC method.”

Axel Fischer

EcoPrint Show in Berlin: An Ambitious Start

A two-day combination of exhibition and conference, meant to attract and inform the players in more than just the German graphic and wide format printing business who want to be the most sustainable – that was the EcoPrint show in Berlin in September, opening in the halls of a former Berlin station. While still lacking part of the wider audience, it attracted a sufficient number of exhibitors and multipliers to keep many of those busy for the two days. Being in the development committee from the beginning, Axel Fischer of INGEDE tried to introduce sustainability also from the paper recycling side, while HP as a main sponsor kept the surrounding website and its pre- and after-show activities in a constant danger of losing credibility by performing as a greenwashing platform especially for HP Indigo. With more and more printers being aware of the environ-

mental disadvantages of this printing technology, HP now puts increased effort in identifying new marketing opportunities.

the paper value chain. Axel Fischer had the chance to participate in a panel discussion about the question of the necessity of ecolabels chaired by Laurel Bruner of Verdigris, an initiative also heavily sponsored by HP, and co-speakers, among them Uwe Soyer from FSC Germany. On day two, Fischer chaired a technical session with Laetitia Reynaud (Intergraf), Andreas Steenbock (Steinbeis), Rudolf Wilden (ERM) and again Uwe Soyer about “Product Compliance in Rapidly Emerging Legislations”. Fischer was also invited to give a presentation on “The Value of Deinking” that attracted a few more visitors than the technical session before



INGEDE stand at EcoPrint Show

ment and was followed by more discussions at the INGEDE stand that also introduced the activities of the new EcoPaperLoop project.

Still, at the show exhibitors like Steinbeis with a large stand and Xeikon, UPM, Ricoh, CWN Printing with some support by Xerox, INGEDE, and others tried to inform about deinking and deinkability being an important part of

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Axel Fischer