

## Short-term scientific mission at INGEDE



INGEDE hosted the PhD student Ivana Plazonić from the Faculty of Graphic Arts, University of Zagreb, for three weeks (13 February to 6 March 2009).

paper mill in Switzerland where Wolfgang Heinzmann hosted me. In Utzenstorf the problem of red discolouration and their method for red discolouration evaluation was presented. Samples were collected from Utzenstorf's paper warehouse (magazines, flyers, newspapers...) and from Stora Enso Maxau for a further study that took a place in INGEDE office in Bietigheim-Bissingen, Germany.

On the collected samples laboratory trials of two methods were carried out - the Utzenstorf method for the evaluation of red discolouration (visual method of evaluation degree of redness of filtrate) and the INGEDE Method 11 (deinkability test).

The main question before the laboratory work started was: Does the Utzenstorf Method used as entry inspection really determine which materials would and which wouldn't show a red shade in the final product? The results showed that if red shades of the filtrates occur, they do it with both methods. However, this does not necessarily correspond with the shade of the pulp of membrane filter pads.



Ivana Plazonić second from left

The purpose of this short-term scientific mission (STSM) was to develop and reform an existing method for the evaluation of red discolouration and convert it to an INGEDE Method.

The method for the evaluation of red discolouration in question has been used in Utzenstorf paper mill, Switzerland, for over four years. It is practiced as an entry inspection of the recovered paper as a main material for producing recycled paper. Red discolouration negatively influences the optical properties of deinked pulp as well as the corresponding process water. The problem of red discolouration in manufactured pulp and parallel in the process water is a problem that is noticed not only in Utzenstorf paper mill but also in other mills.

A part of this study was in Utzenstorf



of the pulp of membrane filter pads.

...continued on page 2

### In this issue:

- ZELLCHEMING coming up (page 2)
- Deinkability and Inkjet in the USA (page 3)

## CALENDAR OF EVENTS

31 Mar 2009  
INGEDE Technical Committee  
Deinking

Frankfurt/Germany

1 Apr 2009  
INGEDE Project 125 08 CTP  
"ValIOBA"

Grenoble/France

1-2 Apr 2009  
PTS Fachseminar

"Sicherung der Qualität von Altpapieren – Voraussetzung für die optimale Altpapiernutzung und -aufbereitung"

Heidenau/Germany

23 Apr 2009  
INGEDE Project 122 08 PTS

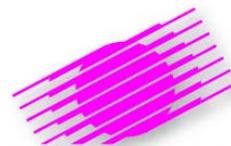
"DIP Characterization"  
Munich/Germany

28-29 Apr 2009  
INGEDE Working Group  
"Recovered Paper Quality"

WEPA  
Müschede/Germany

6-7 May 2009  
COST E 48 Final Conference  
"The limits of paper recycling"  
Munich/Germany

8-9 June 2009  
INGEDE Working Group  
"DIP Quality Management"



Therefore the following conclusions can be taken:

The red ink particles are dissolved in water and in that shape they are so little that they couldn't be measured with the available equipment. Definitely, I can say that the problem with red shade is not only a consequence of



reactions in the deinking plant; it is a consequence of reactions between storage and the paper machine. Therefore looking for solutions will need to take place in the water circuit treatment or in the wet end of the paper machine. It is very likely that fixing and precipitation reactions are responsible for the shade of the pulps

in the paper mills.

I am very grateful to Mr. Andreas Faul from the INGEDE office who invited me to be a part of the INGEDE office team and work with them on this issue and for all knowledge that I adopted during that period. And of course I am most grateful to Mr. Jan-Erik Levlin, Chairman of COST E48, who made this STSM possible.

*Ivana Plazonić*

## The 104<sup>th</sup> ZELLCHEMING Annual General Meeting and ZELLCHEMING Expo



Meeting and Expo will be held from 23<sup>rd</sup> June to 25<sup>th</sup> June 2009 in the Rhein-Main-Hallen of Wiesbaden, Germany.

The congress addresses the executives of the cellulose and paper industry as well as their supply industries. Technical directors, managing directors, mill managers and production managers, lecturers and representatives of research and development tend to make a better use of the congress with regard to their training, for the establishing of new contacts and the exchange of experience and information. During the years, the congress has developed its own, unique character. The Expo's attractiveness, the technical and scientific conferences as well as the social supporting program made of ZELLCHEMING's General Meeting the biggest annual event of that kind in Central Europe.

You can find the detailed program of presentations of the ZELLCHEMING

conference on [www.zellcheming.com](http://www.zellcheming.com). Approximately 300 Exhibitors coming from more than 20 countries present their newest developments and products on the show.

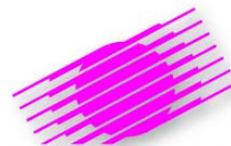
The ZELLCHEMING Annual General Meeting and Expo in combination with the ample Social Program like the Swedish Reception, the Finnish Reception, the VDMA Reception and the ZELLCHEMING Summer Evening offer a unique platform in Central-Europe to our branch to find new, professional contacts – come to Wiesbaden, we are looking forward to welcoming you.

Hotel accommodations can be booked by calling Wiesbaden Tourist Service under +49 (0) 611 1729 777 or by visiting [www.zellcheming.com](http://www.zellcheming.com) where you will find under "General Meeting" a list of hotels whom you can contact directly.

Further information can also be obtained on this website or by direct

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## IMI's Inkjet Conference: Inkjet for Newspapers

IMI's 18th Annual Ink Jet Printing Conference on February 4–6, 2009 in Foster City, California focused on ink jet's progression into new applications and markets.

The program featured presentations from leading companies and industry experts including InfoTrends, Océ North America, ST Media Group, SunJet, Tonejet, Xaar, Xennia Technology and Xerox. Axel Fischer presented "Why Inkjet Inks Must Be

Deinkable". This led to a lively discussion and a variety of new contacts including Sensient Inks, BASF North America and other ink and printer manufacturers.

It turned out that INGEDE's activities and especially INGEDE Method 11 are very well known

and kept track of in the US as environmental aspects begin to play an important role in marketing there now. This is why intense questioning of the relevance is placed by Companies like HP whose revenues according to Marco Boer, Consultant with I.T. Strategies in Hanover, were more than \$13 bn or almost 50 percent from inkjet. HP outnumbers all other companies by far according to Boer, the next being Epson with less than \$5 bn. Most of Hop's worldwide revenues come from ink sales.



Duncan Newton of Océ North America presented an inkjet printed newspaper given to Qantas passengers to Australia at Los Angeles Airport. He claimed it to perform better in terms

of water fastness than the samples of Océ's inkjet news gathered at drupa 2008. A simple test with a drop of water did not confirm that.



## US Sustainability Managers Discover Deinkability National Environmental Health and Safety Conference in Indianapolis

The 2009 National Environmental, Health & Safety Conference (NEHS) (Indianapolis, USA, March 16–18), brought together graphic communication professionals from around the country to discuss sustainability and other safety issues affecting printing companies across all platforms.

The conference, themed "Printing for a Sustainable Future," offered invaluable opportunities for printers to learn how to be environmentally conscious. Here Axel Fischer explained the process of paper recycling and the problems created by flexo inks, inkjet, UV cured inks and liquid toner. Surprisingly the flexo situation was well

understood and not questioned at all – despite an article that had been published in TAPPI's Paper360° just before ("Will ink jet papers become a digital nightmare?" by Charles P. Klass, February 2009, link [here](#)).

In this article tagged "opinion", Klass – whose other publications mainly deal with coating but who also has been a consultant for HP – states that flexo is being handled without problems in the US and INGEDE



Method 11 "isn't relevant to many – if not most – commercial deinking processes in North America".

Robert C. Tapella (photo: Jeff Adrian), Public Printer of the US (head of the Government Printing Office GPO), discussed sustainability strategies to reduce overall environmental impact and why it's important to embrace the "greener" movement.

The conference led to intense contact with members of the US paper chain, among them GPO representatives who are very concerned also about deinkability issues.

Axel Fischer

