



Inkjet market and technology advances – the place to take the pulse of the industry

IMI Europe Digital Printing Conference 2016

**Wednesday 30 November –
Thursday 1 December 2016**

The IMI Europe Digital Printing Conference 2016 is the strategic business and technical conference for the digital inkjet printing industry. It includes market and application overviews from senior executives and analysts, as well as the latest technology developments covering printheads, inks, software and other areas. Our flagship strategic event is the ideal place to find out the latest news from major companies, while exploring business opportunities by networking with top executives across the industry.

Alchemie Technology // Archipelago
Technology // AVA-CADCAM
AVT // Dystar // EFI // Exergen Global
FUJIFILM Dimatix // Inca Digital Printers
Infotrends // InPrint // IT Strategies
Kuei // Océ Technologies
Pivotal Resources // Scanlaser
World Textile Information Network
Xaar

Market Reports Live

Tuesday 29 November 2016

Market Reports Live are half-day market and technology briefings on important digital applications – vital information in an easily-digestible form. The sessions offer market and technology forecasts from leading industry analysts, plus the opportunity to ask questions.

DIGITAL TEXTILE PRINTING

A half day market and technology briefing brought to you by WTIN Experts James Rankin and John Scrimshaw



Inkjet Academy

**Monday 28 – Tuesday 29
November 2016**

This one and a half day course has been attended by over 3,000 in the past 16 years. Completely revised, this course is aimed at people in the industry who would like an up to date overview of the inkjet technology used today. Led by Mike Willis of Pivotal Resources and Dr Alan Hudd of Alchemie Technology.

Digital Printing Conference
Silver Sponsor:

FUJIFILM
Value from Innovation



Inkjet Academy: The theory of inkjet technology

Monday 28 – Tuesday 29 November 2016

Course focus

Basic knowledge of any industry is essential to its development. The Inkjet Academy covers the basic theory behind the many types of industrial inkjet technology used today and aims to give your understanding of the industry an expert start.

On the course you will learn how printheads work, the materials used in their fabrication and the theory of their operation. You'll also find out about inks

used for industrial printing, and how they are formulated and used. Ink supply and support systems and integration issues are also covered.

The course is designed for those with a basic scientific knowledge and will provide useful background information for anyone entering the industrial inkjet industry, seeking an update on today's technology or looking for further fields of development.

Monday 28 November 2016

12.30 – 13.30 Registration

13.30 Course begins

Introduction to inkjet

- Course overview
- Types of inkjet technology
- Drop on demand technologies
- Thermal and piezo inkjet
- Evolution of inkjet markets
- Inkjet patents

Inkjet ink technologies

- Ink types: aqueous, solvent, oil, phase change & UV cure
- Dyes & pigments
- Inkjet ink formulations
- Inkjet ink design
- Understanding the inkjet printing process
- Drop formation
- Properties influencing piezo ink performance
- Testing an ink for reliability: methods & characterisation

DOD printhead technologies

- Thermal inkjet
- Piezo inkjet
 - » Piston mode designs
 - » Roof mode actuators
 - » Stacked piezo technology
 - » Shear mode designs
 - » Silicon printheads

18.00 Session ends

Reception

18.00 – 19.00

Join us and enjoy wines, beers, canapés, and of course good company!

Tuesday 29 November 2016

09.00 Course begins

Inkjet ink materials and dispersions

- Range of materials and ink chemistries
- Evolution of inkjet inks
- Evolution of dyes
- Pigments and dispersion technology
- Dispersion theory
- Polymers and additives
- Processes and manufacturing

Printhead operational issues

- Drop placement accuracy
- Drop ejection frequency
- Crosstalk
- Reliability
- Life issues

UV Ink chemistry and curing

- UV curable materials
- Monomers
- Oligomers
- Photoinitiators
- UV curing
- Print quality issues with UV inks

Print & image quality

- Factors affecting print quality
- Printhead-ink-substrate
- Greyscale methods

12.30 – 13.30 Lunch

13.30 Session begins

System design issues

- Industrial ink supplies
- Bubble control
- Nozzle maintenance

Emerging technologies

- Kodak Stream
- Memjet
- HP PageWide technology
- Landa Nanography
- Lead-free piezo
- Speed & resolution trends

Inkjet applications

- Coding, marking, mailing, addressing
- Wide format graphics
- Industrial decoration – décor & laminates
- Ceramic tiles
- Textiles
- Commercial printing
- Labels & packaging
- Printed electronics, bio-medical & 3D printing

17.00 Course ends

Alchemie

pivotal
resources

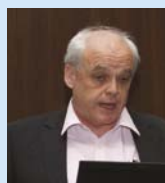
Course leaders



Mike Willis
Pivotal Resources Ltd

Mike Willis is the Founder and Managing Director of Pivotal Resources, an international marketing and technical consultancy specialising in digital printing. He has worked in this industry for the past 30 years, accumulating considerable experience in a wide range of imaging technologies.

Recognised as an industry expert, he regularly speaks and gives tutorials at printing conferences in Europe and North America. In addition he is the publisher of Directions, a service that monitors inkjet patents and significant product launches.



Dr Alan Hudd
Alchemie Technology Ltd

Dr Hudd is Director and co-founder of Alchemie Technology Ltd. Alchemie is an independent contract development and consultancy company to the industrial inkjet industry. Alchemie is also developing and commercialising a range of novel printhead technologies through its Joint Venture company, Jetronica. Jetronica specialises in supplying solutions to selectively pattern liquids and powders capable of using a wide range of chemistries from graphene through textile pre-treatments and 3D printing of metal powders to drugs for implantable drug devices.

Alan Hudd was the Founder and Managing Director of Xenia Technology from 1996 to 2012.

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Digital Textile Printing

Tuesday 29 November 2016 | 13.30 – 17.00

James Rankin | Market Intelligence Analyst | John Scrimshaw | Editor | WTiN



Digital textile printing is still considered by many to be “the next big thing” in digital printing and with some of the highest growth figures in the industry digital textile printing continues to offer opportunities to those looking to grow. With continued development comes uncertainty and mixed messages for those wanting a clear picture of what is really happening. What is the true growth within the market? What is the scope of digital textile printing in the future? What is really feasible today for printers and designers? Come and find out from WTiN Experts James Rankin and John Scrimshaw!

- An overview of the leading factors driving the digital textile market forward and will they change
- A structured view into where the maximum opportunities lie in the coming years and how the leading brands are positioning themselves to be successful
- An assessment of the new technologies from ITMA and ITMA Asia and what impact they have had in the industry a year down the line
- A discussion of what is still missing from the market and what can be done to bridge these gaps
- A discussion on the future of digital textile printing and what technology needs to develop to enable further growth and mainstream applications



About James Rankin

While James's involvement in the Digital Textile market is relatively recent his experience as a market analyst and consultant within the technology and printing industry has brought him a wealth of knowledge in understanding how markets can change and where opportunities for growth lie. James's work at WTiN is focused on bringing increased knowledge and analysis to the fast moving world of digital textile printing that continues to show increasing potential.



About John Scrimshaw

John is the editor of Digital Textile Magazine, the leading global magazine for the digital textile dyeing, printing and finishing industry which launched in 2004 as a dedicated news source for the global industry. He also edits the related International Dyer magazine. In addition, he acts as editor of ITMA Daily News/Textile Daily News, published at the ITMA and ITMA Asia + CITME shows, and of the IMPACT Special Reports on sustainability in the textile industry, and he regularly contributes textile industry news and analysis to the WTiN.com textile-business-intelligence portal.

About WTiN

World Textile Information Network (WTiN) is an innovative B2B media company that lies at the heart of the global textile industry. Serving the textile value chain, from raw material to finished goods, through online, events and publications, WTiN provides the must-have information on manufacturing technology, environment and ethics, textile markets, finance, companies and events. The company has been working in the textile industry for 130 years with publishing and textile manufacturing knowledge. Our strengths include sector specialists, analysts and a key global contributor network all supplying valuable information into the market. With a global reach WTiN partners with a wide range of organisations including CEMATEX, CNTAC, INDA, CNITA, Messe Frankfurt, DnB & ITME across the industry both through events and publications.

IMI Europe Digital Printing Conference 2016

Wednesday 30 November – Thursday 1 December 2016

Inkjet market and technology advances

The IMI Europe Digital Printing Conference is the flagship strategic business and technical conference for the inkjet industry, trusted as a primary source of high value information by senior executives and commercial managers for more than 15 years.

This two-day event includes market and application overviews from key industry figures, as well as the latest technology developments from leading players covering printheads, printing systems, inks, software and other significant areas.



Conference speakers

- Marco Boer** | IT Strategies
- Catherine Cresswell** | Infotrends
- Bob Leahey** | Infotrends
- James Rankin** | WTIN
- Marcus Timson** | InPrint
- Giorgio Macor** | Kuei
- Dr John Mills** | Inca Digital Printers
- Liz Logue** | EFI
- Marc Torrey** | FUJIFILM Dimatix
- Nick Langford** | AVA-CADCAM
- Eric Degoeijen** | Océ Technologies
- Sander Jansen** | ChangeVenture
- Michael Almagor** | AVT
- Bart van Liempd** | Exergen Global
- Andrew Morse** | Xaar
- Dr Alan Hudd** | Alchemie Technology
- Markus Dorer** | Dystar
- Guy Newcombe** | Archipelago Technology

Wednesday 30 November 2016

08.30 – 09.30 Conference registration

09.30 Morning session begins

Page volumes as an indicator for digital print opportunities

Marco Boer

Vice President, IT Strategies

- Putting the digital print opportunity into context
 - » Sizing key print applications by equivalent A4-size pages, analogue vs. digital, 2015-2020
- Post-DRUPA 2016
 - » Key inkjet technology directional trends
- Sanity check
 - » Eligible pages for digital print and specification requirements to watch
 - » Technology challenges
 - » Business model challenges

Digital Printing Conference Lunch & Receptions Sponsor:

Diamond



Inkjet for packaging: Overview & outlook

Catherine Cresswell

Associate Director, Digital Textile Printing & Communication Supplies Europe Consulting Service, Infotrends

Bob Leahey

Associate Director, Color Digital Label and Packaging (CDLP) Consulting Service, Infotrends

Digital printing has been a tool for packaging converters for over 20 years, first for printing labels and, more recently, for the direct printing of folding cartons, flexible packaging, corrugated, and even bottles and cans. In each of these areas inkjet is either an established contributor or a prospective one. What is the status of inkjet in these deep, growing, and mainly analogue printed markets? What's the outlook? This presentation will answer these questions, and in the process will discuss these topics:

- Main colour inkjet vendors for labels, folding cartons, corrugated printing
- Inkjet for flexible packaging, key vendors at work now
- Where HP Indigo and other EP competition will stay strong, and why
- Which inkjet news from Drupa 2016 will move markets in 2020
- Direct-to-shape inkjet... vendors who will enable mass customisation
- Inkjet packaging print market estimates for Europe, 2015-2020

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Global developments to date in digital textile printing and drivers for future growth

James Rankin

Market Intelligence Analyst, World Textile Information Network

The presentation will provide a brief overview looking at the current growth rates seen within the industry and key technologies that have enabled the market to grow to its current size and shape. We will then look at the current stumbling blocks that exist within the industry and the developments we still need to see to drive future growth.

Inkjet and décor: Dream or reality?

Marcus Timson

Co-Founder, InPrint

Giorgio Macor

Founder, Kuei

InPrint has undertaken research into the trends and opportunities for décor printing with inkjet. This presentation examines the results and the 'growing pains' and opportunities for inkjet for new décor markets.

Kuei will provide an example of the reality of direct-to-surface inkjet décor with insight into the development of a 3D haptic ink capable of texturing wood effects.

12.30 – 14.00 Lunch

14.00 Afternoon session begins

Technical and commercial challenges/benefits of single pass technology

Dr John Mills

CEO, Inca Digital Printers

Large-scale industrial single pass printers are difficult and expensive to develop. There are considerable technical challenges in providing printheads with ink and data, and in making a reliable process: the combination of ink, substrate and drying which delivers the required print quality. An even greater challenge can be the development of a viable business model, when you consider ink cost, printhead cost and uptime. This presentation outlines some of the challenges found by manufacturers and printers.

The analogue to digital transformation

José Luis Ramón

Vice President/General Manager Industrial Printing, EFI

José's talk will cover the following areas:

- EFI's strategy for the analogue to digital transformation
- Hardware, software and ink integration
- Inkjet market penetration
- New markets including corrugated packaging

The SIMEMS printhead factory revisited

Marc Torrey

Vice President, Product R&D and Marketing, FUJIFILM Dimatix

Three years ago at IMI Europe's 21st Annual European Inkjet Conference, FUJIFILM Dimatix President and CEO Martin Schoeppler introduced his vision of a Silicon MEMS Printhead Factory, based on the experience gained from birthing the Samba printhead technology. This presentation takes a look at how that vision has withstood the passage of time, focusing on the following areas:

- The proliferation of designs enabled by the Si MEMS process
- The importance of die packaging to successful printhead deployment
- Recurring themes in upstream integration requirements
- The role of scale in emerging applications
- Evolving options for customer engagement

The critical importance of software in digital printing for the decorative industries

Nick Langford

CEO, AVA-CADCAM

The arrival of high speed digital printers presents exciting opportunities for decorative printing of textiles, flooring and wall coverings but many decorative printers are struggling to get the results they expected from their investment in digital printing as a result of inadequate attention to the crucial role of software in the digital print workflow for decorative design. Software developed for the signage, packaging and poster industries has some serious shortfalls when it comes to printing sophisticated decorative designs. The talk will discuss the beneficial impact of software designed specifically for decorative applications.

Interactive Panel Session: Inkjet Outlook

Join our interactive session with a panel of experts from key companies to discuss:

- Corrugated packaging presses - what is the market opportunity?
- B2 sheet presses - how do they 'stack up'?
- Managing an inkjet business in the face of political uncertainty - challenge or opportunity?

The session will be chaired by Marco Boer, IT Strategies and Mike Willis, IMI Europe/Pivotal Resources.

Sponsors' Forum

17.50 – 18.30

Hear short presentations from the event sponsors

Reception

18.30 – 20.30

Join us for wine, beer, canapés and good company!

Digital Printing Conference

Bronze Sponsors:



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Thursday 1 December 2016

09.00 Morning session begins

Market driven development for a cause – The making of a game changing sheet-fed colour press

Eric Degoeijen

Vice President Marketing and Product Planning, Océ Technologies

The world of print is changing fast. Everything that can be personal will be personal. Delivery the same day. Constant cost pressure. New propositions are needed that put print providers in the lead; but which? We innovated the way we innovate, leaving our high tech campuses to team up with lead customers. Together we developed the Océ VarioPrint i300, a platform that evolves alongside market developments. iQuarius Technologies, a breakthrough in sheet-fed versatility, inkjet productivity, and uptime enable customers to handle new and more diverse applications. Together we change the world of print.

Developing multiple business models on a cut sheet inkjet infrastructure

Sander Jansen

CEO, ChangeVenture, former CEO, Scanlaser

In an innovative journey of ten years, Sander Jansen has transformed a regular print production company to a full service logistical production and distribution partner for its customers. During this session he will present the case study of Scanlaser and guide the audience through the internal innovation of the company. On top of that he will show how completely new business models were developed and how new business emerged. Sander Jansen will present the highlights of the Scanlaser generic infrastructure that supports three different business models based on the use of cut sheet inkjet in all cases.

Dedicated inspection solutions for inkjet printing

Michael Almagor

Marketing Director, AVT

Inkjet technology brings many advantages and new opportunities to the printing industry, but it also brings a new method of printing technology that has its own limitations and specific defects. AVT developed dedicated solutions to detect the specific defects of the inkjet technology and in order to maximize the benefits of this growing technology. Among AVT's inkjet customers you will find Heidelberg, Landa, EFI and other leading companies in the inkjet printing arena.

Technical challenges of thermal management and increased speed in inkjet printing

Bart van Liempd

CEO, Exergen Global

Production speed is an ever-present challenge in digital printing, and is often exacerbated by thermal management challenges. There is a continual need to increase speed without elevating equipment heat to levels that cause printer malfunction or degrade product quality. The session will introduce general concepts of thermal management as it relates to inkjet printing and then discuss related technologies and equipment involved in balancing print quality with the need for production speed. A technique will be described based on the speed boost equation, a thermal management concept that includes provisions for the difference between the surface temperature of the equipment, which can be directly measured, and the bulk material temperature, which must be indirectly measured. Using a simple result from a complex mathematical model, the technique can increase production speeds while maintaining material temperature characteristics. Examples of inkjet applications at Kodak will be provided that employ the speed boost equation describing the benefits gained in doing so

Insight into new technological developments from recent patents

Mike Willis

Managing Director, Pivotal Resources Ltd

- The view inside the industry's research laboratories through the patent "window"
- Thermal inkjet has plenty of life left
- Update on Landa and other intermediate transfer technologies
- Challenges for high-speed printing, maybe not what you think!
- Inkjet developments for new non-office applications

12.40 – 14.00 Lunch

14.00 Afternoon session begins

Volume 3D printing: the role of the inkjet printhead

Andrew Morse

Materials Development Manager, Xaar

3D printing is yet to reach its potential in the industrial sector. Slow build times associated with current methods prevent the "industrial 3D printing revolution". Xaar are looking to use their industrial inkjet printheads to drive this expansion. Xaar has recently appointed experienced 3D printing staff in order to maximise the commercial potential of volume manufacturing using inkjet printheads.

Digital additive manufacturing is growing from strength to strength

Dr Alan Hudd

Founder & Director, Alchemie Technology

- Novel digital technologies to selectively pattern liquids and powders directly
- From healthcare to highly complex 3D based structures
- Requirements for productive 3D processes
- Digital printing graphene to transform the performance of printed structures
- Producing the digital poly pill; the additive manufacturing solution for old age



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Vat dye inkjet inks for digital textile printing

Markus Dorer

Global Head of Marketing Printing, Dystar

Digital textile printing has become truly industrial, with the fashion segment based on reactive and sublimation ink shows being the main focus for growth in the recent years. Specialist textile markets such as home textiles have not yet adopted digital significantly due to the need for high fastness levels not provided by existing solutions. Vat dyes have significant importance in this segment in conventional coloration, but until now no similar solution was available for digital printing. DyStar and Zimmer have between them created the first digital print solution for high fastness home textiles. The vat dye inkjet inks have the same performance characteristics as regular vat dyes. The technology background and application performance are outlined in the talk.

Powerdrop: a different way of jetting difficult materials

Guy Newcombe

CEO, Archipelago Technology

The world market for coatings and adhesives is more than 100 times greater than the market for industrial digital printing inks. It is also well-informed and open to the benefits that non-contact deposition brings in terms of lower costs and improved performance. What's held the development of these markets back? These materials are sticky, viscous and generally troublesome, particularly if you're trying to get them through an inkjet nozzle. In this talk, Guy will set out the business opportunities in a range of applications and explain how Archipelago's Powerdrop technology fundamentally addresses the problems that until now have held back the growth of this important market.

17.00

Conference end

Upcoming IMI events

Digital Print Japan 2016

13 – 14 December 2016

Keio Plaza Hotel, Tokyo, Japan

Come to Digital Print Japan to get an update on trends and technology in the textiles, commercial and industrial inkjet printing markets. It consists of two events: the WTIN Digital Textile Conference and the IT Strategies Executive Conference.

Inkjet Winter Workshop 2017

23 – 27 January 2017

Tryp Apolo Hotel, Barcelona, Spain

The IMI Europe Inkjet Winter Workshop is the ideal way to learn more about inkjet technology, with an in-depth look at key aspects of digital printing application development.

IMI Inc Inkjet Printing 2017 Conference

1 – 3 February 2017

Florida Hotel and Conference Center, Orlando, FL

If you are responsible for a strategic view of the industry for your company or are evaluating new applications and opportunities; then this event is a must!

Inkjet Engineering Conference 2017

14 March 2017

Aquatris Hotel, Lausanne, Switzerland

Components and techniques for inkjet system development and production.

Inkjet Ink Development Conference 2017

15 – 16 March 2017

Aquatris Hotel, Lausanne, Switzerland

Materials, equipment and techniques for inkjet fluid development and manufacturing.

Inkjet Summer School

12 – 16 June 2017

Novotel Ghent Centrum, Ghent, Belgium

A selection of high quality 1.5 day technical courses on topics of interest within inkjet printing, including the world-famous Inkjet Academy. The IMI Europe Inkjet Summer School is the ideal way to gain a more detailed understanding of a specific technology area, with six courses presented by experts in their field.

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Dimatix



For all the latest information visit:
www.imieurope.com

Register on-line at www.imieurope.com

For more information see www.imieurope.com

Registration fees

Inkjet Academy Course

- Attendance at all sessions
- Course reference binder & pdf presentations
- One lunch
- One reception
- Coffee breaks
- IT Strategies inkjet printer and supplies market report

Standard fee: €995

On-site registration: €1,195

Market Reports Live

- Pdfs of presentations
- One lunch
- One reception
- Coffee breaks
- IT Strategies inkjet printer and supplies market report

Standard fee (one course): €595

Standard fee (two or more courses): €495

On-site registration fee: €695

IMI Europe Digital Printing Conference

- Attendance at all sessions
- Event guide & pdf presentations
- Two lunches
- One reception
- Coffee breaks
- IT Strategies inkjet printer and supplies market report

Standard fee: €1,095

On-site registration fee: €1,295

21% Netherlands VAT will be added to all registrations

Discounts

If you register for both the Inkjet Academy and the Digital Printing Conference, there is a €200 saving on the total fee.

If you register for a Market Reports Live session as well as the Digital Printing Conference, there is a €100 saving on the total fee.

We also offer a 20% discount for additional registrations from the same company. If you would like a quotation please email enquiries@imieurope.com with your requirements.

Booking policy

Cancellations will receive a 50% refund if made more than two weeks prior to the start of the event (i.e. on or before 14 November 2016). After this time, no refunds can be made, but your registration may be transferred to another IMI Europe or IMI Inc event at no charge. Name changes for a registration may be made at any time, free of charge, but please let us know before the event so we can update our records.

How to register

Please register on-line via our website:

www.imieurope.com

We will check availability and email your registration confirmation together with an invoice with payment details.

Location and hotel information



Digital Print Europe 2016 will be held at the Novotel Amsterdam City in Amsterdam, Netherlands. Hotel reservations and charges are the responsibility of each conference registrant.

The Novotel Amsterdam City is a 4 star hotel in the centre of Amsterdam's business district, close to the RAI Congress Center and the World Trade Center. The city centre and Schiphol Airport are 15 minutes away by tram, subway or train from "RAI" station, which is within walking distance.

During your stay why not end the day by enjoying some relaxation in the Wellness Area which has a sauna and lounge chairs to unwind, or if you're in a hurry you can grab a coffee and snack on the go, from morning to evening.



We've negotiated a special room rate:

Single occupancy €139.00 per room, per night

Double occupancy €159.00 per room, per night

Rates include breakfast and taxes and exclude 5% city tax. The special rate can be booked until 4 November 2016. Beyond this date, the rate will be available – subject to room availability.

Cancellation Policy

You can cancel your reservation free of charge until 7 days prior to arrival. For cancellations between 7 and 3 days prior to arrival the hotel will charge 1 room night.

Any cancellations made within 3 days prior to arrival, the hotel will charge 100% of the expected costs – this includes no shows, late arrivals and changes made during your stay.



Novotel Amsterdam City
Europaboulevard 10
1083 AD, Amsterdam
Netherlands

T. +31 020 721 9179

F. + 31 020 646 2823

E. H0515-sb@accor.com

www.novotelamsterdamcity.com

Amsterdam

Amsterdam is a vibrant city famous for its canals, museums and historical sights. One of the most popular attractions in Amsterdam during December is the Christmas markets.

Hotel reservations and charges are the responsibility of each conference registrant. Special room rate €139 per night (double room €159) including breakfast and taxes, guaranteed up to 4 November 2016, subject to availability after this. Please book via our website www.imieurope.com to receive this rate