

The Ink Jet Technology Showcase - one of IMI Europe's largest events - has always been great, and this year it's even better! With keynote presentations on emerging markets and applications, Tech Talks covering some of the latest scientific developments, and this year the InPrint Industrial Print Forum, it's the ideal place to source ink jet products and services!

InPrint Industrial Print Forum

Wednesday 24 June, 2015



FEATURED INDUSTRY SUPPLIERS

adphos Digital Printing

Amica Systems Europe

Excelitas Technologies

Global Inkjet Systems

Kyocera Fineceramics

Fujifilm Imaging Colorants Fujifilm Specialty Ink Systems

Agfa Graphics

Collins Inkjet ColorGATE Digital

Fujifilm Dimatix

ImageXpert

Ardeje

A new section for this 2 day event, focusing on industrial print, is the InPrint Industrial Print Forum hosted by Frazer Chesterman and Marcus Timson, organisers of the InPrint trade show. Leading consultants, brand owners and end users will help you understand the current and future capabilities of industrial digital printing. Full details on page 4.

IMI Europe Industrial Ink Jet Technology Showcase Wednesday 24 - Thursday 25 June, 2015



COME FOR INSPIRATION - INDUSTRY OVERVIEWS

Hear a range of invited speakers inform and inspire you about new applications and markets that are offering exciting new opportunities for ink jet technology. Speakers include Mark Hanley of IT Strategies, Jason Oliver of Heidelberg, and Ingo Ederer of Voxeljet.



HEAR KEY SUPPLIERS PRESENT NEW PRODUCTS

Hear the leading suppliers of hardware, inks, curing systems, and other components and services to the ink jet industry present their company's products and services. Each exhibitor will give a 15 minute presentation. Think how much you can learn without travelling the world to meet with them all!



MEET THE SUPPLIERS AT THE DEVELOPERS FAIR

Meet with the leading suppliers to the ink jet industry during the inclusive conference breaks, lunches and evening reception. Make those important first contacts, catch up on the latest developments and products, or remake old contacts, discuss your latest applications or seek advice.



FREE TRAINING - INK JET TECH TALKS

Join our four optional tutorials at no extra cost for registrants to the Industrial Ink Jet Technology Showcase 2015. Listen to the experts discuss some of the latest scientific findings and techniques information that you can use immediately!

Ink Jet Summer School

Pivotal Resources Ricoh Europe RJA Dispersions TTP Meteor

Wifag - Polytype Technologies **Xennia Technology**



INK JET ACADEMY THEORY OF INK JET TECHNOLOGY

INK JET INK MANUFACTURING COURSE **MANUFACTURING INK JET INKS FOR PERFORMANCE & RELIABILITY**

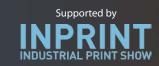


JETTING FUNCTIONAL FLUIDS COURSE RHEOLOGY, DEPOSITION, PROCESS, DEVELOPMENT

IMI Europe's top 3 courses

JUNE 22-23, 2015

Full course details on pages 9-11



INTRODUCTION

IMI Europe's Industrial Ink Jet Technology Showcase is a proven programme concept to enable current and potential ink jet printing system developers, integrators and users to obtain detailed technical information and establish professional working relationships with ink jet printing technology providers.

The Industrial Ink Jet Technology Showcase 2015 will provide:

- 3 Keynote presentations by acknowledged experts
- Exhibits by key ink jet printing technology suppliers
- Technology supplier presentations
 highlighting their technology's capabilities,
 applications & advantages
- 4 Ink Jet Tech Talk tutorials by industry experts
- InPrint Industrial Print Forum hosted by Marcus Timson & Frazer Chesterman overviews, success stories & requirements of the fast-growing digital print sector
- Course proceedings containing technology suppliers presentation notes
- IT Strategies report containing market size and forecast information for the printer and supplies market worldwide
- Networking opportunities with all categories of ink jet printing professionals
- "Field Trip" visit to the adphos manufacturing plant, followed by dinner at a brewery

Participation at IMI Europe's Industrial Ink Jet Technology Showcase 2015 could well be the most productive two days ever in your efforts to utilise ink jet printing technology in your company's future. **Register now!**

EVENT VENUE

angelo Hotel Munich Westpark, Munich, Germany

The Industrial Ink Jet Technology Showcase 2015 and Ink Jet Summer School 2015 are being held at the angelo Hotel Munich Westpark, Munich, Germany.



Opened in 2013, the angelo Hotel Munich Westpark is the newest of the seven angelo design hotels worldwide. This modern and vibrant 4 star hotel has 185 rooms and 22 suites all designed with black, coral red, yellow and white interior. A cosy and comfortable atmosphere is guaranteed with fully equipped bathrooms, free WiFi and amenities such as: tea and coffee making facilities, bathroom floor heating, climate control, flat-Screen TV and Satellite TV. A fitness and wellness area is equipped with high-tech fitness machines and a sauna.

The hotel provides underground parking with 70 parking spaces for €15 per car per night, or there is free parking in the surrounding streets.

The angelo Hotel Munich Westpark is a 3 minute walk from Harras U-Bahn and S-Bahn stations. The line S7 (direction Wolfratshausen) goes directly from the main station to Harras without any change and is approximately 10 minutes.

Special room rates

€149 single occupancy Twin Superior 22, 23 June €165 single occupancy Twin Superior 24, 25 June

Room rates are per room, per night (inclusive of 7% VAT), include full buffet breakfast (including 19% VAT), free Wi-Fi throughout the hotel and meeting rooms, and free access to the fitness and wellness area.

To book your accommodation please use our downloadable PDF form on our website, which you can save, fill in and then fax or email directly to the hotel. Alternately please telephone the hotel and mention you are a delegate at the IMI Europe event to receive our special rate. Cancellations should be made 28 days prior to arrival.

angelo Hotel Munich Westpark

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Email: convention@angelo-munich.com Web: www.vi-hotels.com/angelo-munich

INK JET TECHNOLOGY SHOWCASE 2015 MEDIA PARTNERS



Graphic Display World is the UK's coolest website providing punchy and concise up-to-the-minute news, views and industry opinions covering the world of digital printing.

www.graphicdisplayworld.com



IndPrint looks at the innovative and exciting technology that continues to grow and becomes stronger day by day. It looks closely at the processes to print on speciality substrates such as wood, glass, plastic, vinyl, metal and more. It even delves into the unknown for many with in-depth case studies and white papers on augmented reality, 3D printing and electronic printing. The industrial printing market is one that is booming, and more and more companies are looking to it to expand their portfolios and revenue channels. With the magazine we want to show how exciting industrial printing really can be and the potential it holds!

www.earthisland.co.uk



Large Format is a leading magazine for large-screen printing, sign making and presentation on the German market.

www.largeformat.de



Printlnnovation.de, the e-zine of LARGE FORMAT, is the new online platform focusing on industrial print. On a daily basis Printlnnovation.de informs about innovations, applications and products in the field of decorative and functional printing.

www.printinnovation.de



P4 Inkjet Magazine is the first online printing magazine of Turkey. It focuses on 4 printing areas: textile printing, industrial printing, 3D printing and printable electronics.

www.inkjetmagazine.com



Founded in 2010, Output is a business intelligence source for the print, digital, design, manufacturing and emerging technology sectors. With a mix of breaking news, detailed analysis and extensive feature and video content, Output ties together the disparate elements of the visual communications world and identifies the trends, technologies and ideas that make the industry tick.

www.outputmagazine.com

Photo Imaging flews

The worldwide Photo Imaging News team, based in Bonita Springs, Florida, USA, publishes PDF international industry periodicals in Chinese and English as well as an Excel-based statistical Global Syndicated Market Forecasting programme covering picture-taking and picture-making from 2000 through 2016 in 30 regions, sub-regions and countries around the world. In addition the team, with representatives/offices in China, India, Japan and the UK, provides custom global market reports and consulting services.

http://photo-news.com





Ink Jet Technology Showcase 2015

Wednesday June 24, 2015

08:00 - 09:00

REGISTRATION OPENS

09:00 SUPPLIER EXHIBITS OPEN

INPRINT INDUSTRIAL PRINT FORUM





INTRODUCTION **SESSION 1 - PACKAGING, BRAND & RETAIL**

Marcus Timson, Director & Co-Founder, FM Brooks - InPrint Show, Leatherhead, UK

Speakers

09:00

Steve Lister, Charterhouse Paul Jenkins, The Pack Hub Simon Edwards, Tonejet

SESSION 2 - DESIGN & DÉCOR

Hosted by Frazer Chesterman, Director & Co-Founder, FM Brooks - InPrint Show, Leatherhead, UK

Speakers

Markus Benesch, Markus Benesch Creates Giorgio Macor, Kuei Frank Seemann, Erfurt & Sohn

SESSION 3 - FUTURE TECHNOLOGY

Hosted by Dr Tim Phillips, Marketing & Business Development Manager, Xennia Technology, Letchworth, UK

Dr Patrick Smith, University of Sheffield **Prof Dr-Ing Ferdinand Trier** Mark Ritchie, Xaar

13:00 LUNCH



INDUSTRIAL INK JET TECHNOLOGY SHOWCASE

14:00 - 14:45 KEYNOTE PRESENTATION

INDUSTRIAL INKJET: HIGH AMBITION TAKES ON THE CHALLENGE

Mark Hanley, President, IT Strategies, Hanover, Massachusetts, USA

- Industrial markets like packaging ARE a big challenge
- But textiles, ceramics and other markets inspire confidence
- Resource and support issues for the smaller vendor
- · An epidemic of creativity in Europe

TECHNOLOGY SUPPLIER PRESENTATIONS 15:00 - 17:30

15 minute presentations from the key suppliers in the ink jet industry

TECH TALKS

HOW TO QUALIFY INKS FOR INKJET COST EFFECTIVELY?

Thomas Gerhardt, ToJET GmbH, Berlin, Germany

DISPERSION TECHNOLOGY FOR PIGMENT BASED INK JET INKS

Dr Alan Hudd, Director, Alchemie Technology, Cambridge, UK

18:30 - 20:00 RECEPTION IN EXHIBIT AREA

Thursday June 25, 2015

09:00 SUPPLIER EXHIBITS OPEN

TECH TALKS

09:00

INK TESTING FOR INDUSTRIAL INK JET PRINTHEADS

Dr Tim Phillips, Marketing and Business Development Manager, Xennia Technology, Letchworth, UK

09:30

HOW PRINT QUALITY AND PERFORMANCE IS INFLUENCED BY INKJET WETTING TO FIXATION CONFIGURATIONS IN DIGITAL PRESSES

Dr Kai K O Bär, adphos Digital Printing GmbH, Bruckmühl, Germany

TECHNOLOGY SUPPLIER PRESENTATIONS 10:00 - 13:00

15 minute presentations from the key suppliers in the ink jet industry

13:00 LUNCH

14:00 - 14:45 KEYNOTE PRESENTATION

IS DIGITAL PRODUCT DECORATION ABOUT TO GO MAINSTREAM?

Jason Oliver, Senior VP Digital, Heidelberger Druckmaschinen, Heidelberg, Germany

- What is 4D Printing?
- · Technologies involved
- Markets where it fits
- Challenges and opportunities
- Consumer versus industrial product decoration
- · How it fits in Heidelberg's digital strategy

14:45 - 16:15 TECHNOLOGY SUPPLIER PRESENTATIONS

15 minute presentations from the key suppliers in the ink jet industry

16:15 - 17:00 KEYNOTE PRESENTATION

3D PRINTING: NEW OPPORTUNITIES FOR INK JET PRINTING IN **MANUFACTURING**

Dr Ingo Ederer, CEO, Voxeljet AG, Friedberg, Germany

- Great promise of 3D printing technologies is more justified for industrial production than home use
- Ink-jet based powder binding technology within 3D printing offers outstanding advantages:
 - High productivity with large build envelopes
 - Continuous operation and inline production capabilities
- · Current system concepts and applications
- Insight into future developments

17:30 - 23:30 "FIELD TRIP"



Bus departs angelo Hotel Munich Westpark Arrive **adphos** Headquarters, welcome drink Tour of manufacturing plant, applications lab and testing facility

Arrival at **MaxIrainer-Bräustüberl**, a local brewery, for a Bavarian

InPrint Industrial Print Forum

Wednesday 24 June, 2015



angelo Hotel Munich Westpark, Munich, Germany

Overviews, success stories and requirements of the fast-growing industrial digital print sector - hosted by Frazer Chesterman and Marcus Timson, organisers of the InPrint trade show and Dr Tim Phillips, Marketing & Business Development Manager of Xennia Technology.

Expert speakers will be giving updates and insights on what industrial print is doing and where it is going. A great introduction for the Industrial Ink Jet Technology Showcase, and a preview of what's to come at the InPrint Show taking place in Munich, 10-12 November 2015.



Wednesday June 24, 2015

09:00 - 13:00

SESSION 1 - PACKAGING, BRAND & RETAIL

Hosted by Marcus Timson, Director & Co-Founder, FM Brooks - InPrint Show, Leatherhead, UK



BRINGING DIGITAL PRINT TO LIFE FOR BRANDS & RETAILERS

Steve Lister, Print Sustainability Director, Charterhouse, Hatfield, UK

Charterhouse specialises in seeking out creative and innovative ways to use print in packaging, retail and POP, with clients including BMW, Coca Cola, Heineken and Unilever.



WHEN WIIL PACKAGING EMBRACE THE DIGITAL REVOLUTION?

Paul Jenkins, Founder, ThePackHub, Banbury, UK ThePackHub is a packaging innovation consultancy that specialises in bringing together experience and passion to deliver packaging solutions to brand owners, retailers and packaging suppliers.



THE RISE AND RISE OF CRAFT DRINKS: SOME CHALLENGES, MASSIVE OPPORTUNITIES

Simon Edwards, VP - Sales & Marketing, Tonejet, Melbourn, UK

Key parts of the packaging supply chain are holding back their true potential, the move to beverage cans. Simon presents an overview of the craft drink market trends and discusses the key challenges and solutions to enable this industry to reach its true potential.



Hosted by Frazer Chesterman, Director & Co-Founder, FM Brooks - InPrint Show, Leatherhead, UK



IDENTIFYING CREATIVE APPLICATIONS - ENDLESS POSSIBILITIES OF DIGITAL PRINT FOR INTERIORS

Markus Benesch, Markus Benesch Creates, Munich Markus Benesch Creates is a multi-disciplinary design studio creating surfaces, products, interiors and smiling faces since 1988. Clients include Benetton, Campari, Ferrero, Hewlett-Packard, Mövenpick, Paul Smith and Samsung.



CREATING AMAZING RESULTS FOR INTERIORS THAT WILL EXCITE ALL YOUR SENSES WITH DIGITAL SPECIALITY INKS

Giorgio Macor, Founder & CTO, Kuei, Coseano, Italy



HOW TO DIGITALLY PRINT ONTO WALLPAPER

Frank Seeman, Division Manager - Digital Print & Direct Business, Erfurt & Sohn KG, Wuppertal, Germany

Frank is the CEO of JuicyWalls and will show the audience the omnichannel strategy of Erfurt & Sohn. In addition he will explain why the digital interior design business strenghtens the brand value of Erfurt's core businesses.



Hosted by Dr Tim Phillips, Marketing & Business Development Manager, Xennia Technology, Letchworth, UK



PUSHING THE BOUNDARIES OF INK JET APPLICATIONS

Dr Patrick Smith, Lecturer, Laboratory of Applied Inkjet Printing, Department of Mechanical Engineering, University of Sheffield, UK
Patrick offers his view of the degree of possibilities for ink jet, examples include synthesising silk for medical applications, developing tougher carbon composites for use in aircraft manufacturing and printing conductive



THE CHALLENGES OF DIGITALLY PRINTING ON GLASS – CREATING THE PERFECT 'TRANSPARENT IMAGE'

features onto metal component parts of vehicle engines.

Prof. Dr-Ing Ferdinand Trier

Prof. Dr.-Ing. Ferdinand Trier, previously of University of Munich and BMW will discuss can it be done digitally and can it be applied to the manufacturing world?



FUTURE TECHNOLOGICAL DEVELOPMENTS FOR INKJET AND ADVANCED MANUFACTURING TECHNOLOGY

Mark Ritchie, Product Manager, Xaar, Cambridge, UK



InPrint 2015 is the exhibition for Industrial Print Technology. It is designed to connect state of the art industrial print technology with industrial printing professionals. Taking place in Munich, 10-12 November 2015 alongside Productronica, InPrint will feature 150 exhibiting companies showing the latest specialty, screen, digital, inkjet and 3D printing technologies for industrial print production.

Visitors to InPrint 2014 (8-10 April 2014 in Hannover) attended from a broad range of industries including: ceramics, textile, packaging, aeronautical, automotive, electronics, engineering, sports-wear, pharmaceutical and printing. Exhibitor feedback from InPrint 2014 confirmed that the visitor quality exceeded expectations from all exhibitors whether they were showing industrial screen, 3D or inkjet printing technologies.



InPrint Show organisers
Marcus Timson & Frazer Chesterman

www.inprintlive.com





Ink Jet Tech Talks

Helping you develop better products



HOW TO QUALIFY INKS FOR INKJET COST EFFECTIVELY?

Thomas Gerhardt, Founder, ToJET, Berlin, Germany

- · Having an idea, but how to start
- Basic measurements, what is needed
- Dynamic or static
- How to test the crusting behaviour without damaging a printhead
- Ink stability
- Material compatibility
- Print quality tests



Thomas Gerhardt founded ToJET GmbH in 2002 in Berlin to sell ink jet printheads (IJT-64ID2) for glass ceramics manufacturer IJT based in California (USA). From 2004, ToJET GmbH worked mainly for Francotyp-Postalia GmbH in the areas of: Ink Development and quality control, development of recycling processes, analysis of material problems, conversion of an ink degassing and bottling plant, and development of functional water-based fluids. In 2012, To JET GmbH took over a small portion of products from the former production site of Francotyp-Potsalia. www.tojet.de

DISPERSION TECHNOLOGY FOR PIGMENT BASED INKJET INKS Dr Alan Hudd, Director, Alchemie Technology, Cambridge, UK

- · History of pigmented dispersions
- Stabilisation theory
- Agglomeration and flocculation
- Materials that make the difference
- Processes and manufacturing
- Challenges vs Mother Nature



Dr. Hudd is Director and Founder of Alchemie Technology Ltd. Alchemie is an independent contract development and consultancy company to the industrial ink jet industry. Alan was a founder of Xennia Technology and Managing Director from 1996 to 2012. During this period Alan built Xennia to become a world leading ink jet developer and solutions provider to industrial ink jet markets. In 1987, Alan joined Domino Printing Sciences and spent eight years as the Fluids Technology Manager and is credited with a number of patents and significant innovations within the industrial ink jet industry. www.alchemietechnology.com

INK TESTING FOR INDUSTRIAL INK JET PRINTHEADS

Dr Tim Phillips, Marketing & Business Development Manager, Xennia Technology, Letchworth, UK

- Initial ink trials what to look for & how to select the best ink
- Ink testing methodologies
- Typical test equipment & set-up
- Characterisation
- Print quality analysis
- It doesn't jet is it the ink or printhead?
- Differences between thermal & piezo ink testing



Tim is Marketing & Business Development Manager at Xennia, the leading one stop ink jet solutions house. This has required a strong working knowledge of the latest ink jet technology, and has brought him into contact with a wide range of clients working at the leading $edge\ of\ new\ applications.\ These\ include\ textiles,\ printed\ electronics,$ deposition of functional materials, and bio and medical applications as well as the latest graphics applications. Tim graduated from the University of Cambridge in 1991 with an MA Honours degree in Natural Sciences, and completed his PhD in liquid crystal physics and chemistry at the University of Bristol in 1994. www.xennia.com

HOW PRINT QUALITY AND PERFORMANCE IS INFLUENCED BY INKJET WETTING TO FIXATION CONFIGURATIONS IN DIGITAL PRESSES

Dr Kai K. O. Bär, adphos Digital Printing GmbH, Bruckmühl, Germany

- Principal process analysis of ink wetting, setting, drying & fixation
- Influences & interactions from combination of ink & substrate properties
- Analysis of applied drying technologies & their configurations in today's digital presses
- Commercial case studies comparison on achievable print quality and/ or printing performance for different applicable drying technologies



Since July 2009 Dr. Bär is the Managing Director and President of the adphos Innovative Technologies GmbH, adphos Thermal Processing GmbH and adphos Digital Printing GmbH. Dr. Bär was one of the founders of the IndustrieSerVis GmbH (Rechtsvorgänger of the AdPhos AG) where he practiced as Managing Partner. He was the leader of the business segment "High Temperature Technology and Installations" at IABG, Ottobrunn from June 1993 till September 1996 and was responsible for the Technology-Program "HERMES-Heatstructure-Tests". From August 1989 until May 1990 he was working as an academic staff member at IABG, Ottobrunn, Aachen. www.adphos.de

Event Partner



I.T. Strategies, Inc. is an established research consultancy dedicated to serving companies in digital industrial printing markets worldwide. The company delivers intelligent data, analysis, strategy, and implementation practices to vendors in the digital printing industry around the world. From offices in Boston and Tokyo, I.T. Strategies conducts and delivers research data, offers interpretation and advice, identifies specific opportunities, and helps organizations implement these strategies to achieve effective solutions. We are a custom consultancy with an employee count under 25. I.T. Strategies was built on a vision of Digital printing's long-term dominance of document and industrial print markets – a vision in process of realization.

www.it-strategies.com

INDUSTRIAL, GRAPHICS & HI-VOLUME INKJET GLOBAL MARKET PROJECTIONS REPORT

IMI Europe is pleased to announce that it has commissioned I.T. Strategies, Inc. of Hanover, Massachusetts to prepare a study report entitled "Industrial, Graphics and Hi-Volume Inkjet Global Market Projections" for distribution to all registrants to IMI Europe's programmes.

This exclusive market report is updated at least twice annually and provides an ongoing source of market information based on a consistent methodology and reporting structure. The report is generated from IT Strategies' worldwide computer printer industry model.









sign-up for the event. The final schedule will be published on the IMI Europe web site at **www.imieurope.com** with copies available at registration.

adpho⁵

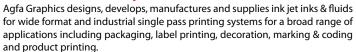
adphos Digital Printing GmbH; With our comprehensive knowledge and application experience of radiation technology, we have the capability to revolutionise technical processes in entire sectors of many industries. adphos, using its adphosNIR*/AcceleratedDryingTechnology", is able to offer standard and customised solutions to other manufacturers and to end users for integration into their process equipment to perform more efficient drying, curing or heating processes, at higher throughput speeds.

Dr Kai Baer Managing Director Tel: +49 8061 3950 info@adphos.de www.adphos.de

adphos Digital Printing GmbH

Bruckmühler Str. 27 D-83052 Bruckmühl Germany





Contact: Dr Marc Graindourze Marketing Manager Industrial Inks Tel: +32 3444 3871 marc.graindourze@agfa.com www.agfa.com

Agfa Graphics NV

Septestraat 27 B-2640 Mortsel Belgium

Join us Wednesday evening for beers, wines, cocktails and hors d'oeurves at our all inclusive reception. This is time to visit the suppliers exhibits, meet with the speakers, and network with the other Industrial Ink Jet Technology 2015 Showcase delegates!



AMICA SYSTEMS

Amica Systems is a leading developer & manufacturer of industrial ink jet solutions. Amica's unique and modular solutions deliver unparalleled value and opportunities for OEMs to build wide-format graphics printers, flat-bed UV inkjet printers, and single-pass inkjet head array digital presses for a wide variety of industrial applications. Amica Systems manufacture large-format inkjet printer and digital inkjet press for OEMs.

Patrick Citroen Managing Director Tel: +31 36 2100 166 info@amicasystems.eu www.amicasystems.com Amica Systems Europe B.V. Camerastraat 6

Camerastraat 6 1322BC Almere The Netherlands



Move with Ardeje within the heart of Industry 4.0. Partner of demanding Industrials in the feasibility phase of their project, ARDEJE provides proven printing solutions resulting in in-house smart digital printers ready to equip robotized and full automated production line.

Pascal Lenormand Sales & Marketing Manager Tel: +33 475 782 663 lenormand@ardeje.com www.ardeje.com

Ardeje

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Collins Inkjet is a technical leader in providing standard and custom formulations of water-based, solvent-based, oil-based, and energy-curable inks to fulfill customers' needs. Collins manufactures and sells millions of litres of inks worldwide and has partnerships with most major printhead manufacturers.

Simone Wieczorek Managing Director Tel: +1 513 948 9000 info@collinsinkjet.com www.collinsinkjet.com **Collins Inkjet**

1201 Edison Drive Cincinnati Ohio 45216



Innovative Solutions

Committed to Color

Since 1997 ColorGATE has been successful developing software solutions, RIP Software and printer driver technology for the Commercial- and Industrial Printing. Our software solutions are used by thousands of end users all around the world. We are actively engaged in the Industrial Printing market since 10 years.

Thomas Kirschner Tel: +49 511 942 930 contact@colorgate.com www.colorgate.com

ColorGATE Digital Output Solutions GmbH

Grosse Duewelstr, 1 Hannover 30171 Germany

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OmniCure® by Excelitas Technologies offers innovative UV curing systems that provide leading manufacturers with advanced, simple-to-use and reliable UV curing technology. Its newest AC275 and AC2110 air-cooled UV LED curing systems combine a compact form factor with advanced front-end optics to provide high peak irradiance and exceptional uniformity.

Tel: +1 905 821 2600 OmniCure@excelitas.com www.excelitas.com/OmniCure

Excelitas Technologies (Omnicure)

2260 Argentia Road Mississauga Ontario L5N6H7 Canada





FUJIFILM Dimatix, Inc., is a wholly owned subsidiary of FUJIFILM Corporation and the world's leading supplier of drop on-demand inkjet printheads for industrial applications, driving a revolution in inkjet technology to support a new generation of products for printing, industrial product decoration and materials deposition.

Howard Baldwin VP, Sales & Marketing Tel: +1 630 460 5922 hbaldwin@fujifilm.com www.fujifilmusa.com

Fujifilm Dimatix 109 Etna Road

Lebanon NH O3766 USA

Full details & registration www.imieurope.com



FUJ!FILM

FUJIFILM Imaging Colorants

FUJIFILM Imaging Colorants (FFIC) is a global leader in the design and manufacture of high performance aqueous colorants and inks for the inkjet market. With an enviable track record in product innovation, and extensive manufacturing capabilities, FFIC brings true innovation and manufacturing scale to ink jet material supply.

US Contact: John Spych **Business Manager** Tel: +1 302 477 8023 John.Spych@fujifilmic.com **EU Contact: Phil Double** Techno-Commercial Manager Tel: +44 161 721 1761 Phil.double@fujifilmic.com www.fujifilmic.com

FUJIFILM Imaging Colorants Inc.

233 Cherry Lane Newcastle DE 19720 USA

FUJIFILM Speciality Ink Systems Limited

Fujifilm Speciality Ink Systems specialises in the development and commercialisation of UV and UV hybrid inkjet technology. It manufactures a range of unique, high performance inks for the wide format, industrial and package printing markets.

Jon Harper-Smith Marketing Manager - Industrial Tel: +44 7831 494799 jon.Harper-Smith@fujifilmsis.com www.fujifilm.eu/fsis

FUJIFILM Speciality Ink Systems Ltd

Pysons Road Broadstairs Kent CT10 2LE



Print Better: Print Faster: Print Smarter. GIS provides industry leading software and electronics to system builders. Any number of printheads: any number of inks: ultra-high data handling capability: high print speeds: production proven reliability: innovative software; ink system components – GIS technology enables system builders to develop ground-breaking products for demanding production environments.

Debbie Thorp Business Development Director Tel: +44 1223 733 733 debbie.thorp@globalinkjetsystems.com Cambridge CB4 0DS www.globalinkjetsystems.com

Global Inkjet Systems Ltd

The Jeffreys Building **Cowley Road**







ImageXpert Inc., the world leader in vision-based inspection systems and solutions for the inkjet market, offers systems for measurement of drops-in-flight, wetting visualization, jet sustainability/life testing and print quality assessment.

Yair Kipman President Tel: +1 603 598 2500 info@imagexpert.com www.imagexpert.com www.jetxpert.com ImageXpert Inc.

460 Amherst Street Nashua NH 03063 USA



Kyocera offers a wide variety of inkjet printhead solutions: from the world's fastest 300dpi printhead able to provide simultaneous two-color printing with only one head, up to the world's fastest 1200 x 1200 dpi KJ4B printhead. The company's product line also includes the KJ4A printhead for UV-curable ink, and the KJ4B for water-based ink - both world record holders in terms of speed with its 600 dpi 4-inch wide printhead.

Kazumi Honda European Product Line Manager Tel: +49 711 9393 4837 Kazumi.honda@kyocera.de **Kyocera Fineceramics GmbH**

Fritz Mueller Strasse 27 73730 Esslingen Germany

http://global.kyocera.com/prdct/printing-devices/inkjet-printheads



We operate at the forefront of ink jet technology, working for vendors and users worldwide. We assist in defining and reviewing product strategies, support the development of new products and processes, and help our clients gain market position. Our clients include many familiar names. Among our services and activities are *Directions*, our ink jet patent review service and the Ink Jet Academy course.

Mike Willis Managing Director Tel: +44 1223 235900 mike@pivotal.co.uk www.pivotal.co.uk **Pivotal Resources Ltd**

11 Glebe Way Histon Cambridge CB24 9HJ

RICOH

Ricoh provides industrial strength, stainless steel ink jet print heads to OEMs with demanding applications in wide format graphics, 3D modelling, ceramics and specialty fluid dispensing.

Graham Kennedy

Business Development Manager

Tel: +44 207 465 1208

graham.kennedy@ricoh-europe.co.uk

www.ricoh-europe.com

Ricoh Europe PLC

20 Triton Street London NW1 3BF UK

Industrial Ink Jet
Technology Showcase 2015
4TECH TALK TUTORIALS

3 KEYNOTES

15 HOURS of PRESENTATIONS 6 HOURS of NETWORKING Downloadable brochure, hotel booking form and on-line registration at www.imieurope.com



RJA Dispersions is a rapidly growing Nano-materials dispersion company founded in 2002. The founders have leveraged their years of experience in digital imaging at major companies and developed a unique business focused on making excellent dispersions for ink jet inks. RJA works with their customers to solve difficult problems, and wins their business based on the relationships established.

Joseph Ward VP Marketing & Sales Tel: +1 715 808 0172 jeward@rjadispersions.com www.rjadispersions.com **RJA Dispersions Ilc**

2745 Harvey St Hudson WI 54016 USA



TTP Meteor is the leading independent specialist in industrial inkjet printhead driving solutions. Working closely with all the major industrial inkjet printhead manufacturers, TTP Meteor supplies production ready electronics and software to printer OEMs and print system integrators world-wide. Headquartered near Cambridge, UK, TTP Meteor is a part of the TTP Group, an assortment of companies employing more than 300 scientific, engineering and commercial staff.

Clive Ayling General Manager Tel: +44 1763 262626 Clive.Ayling@ttp.com www.ttpMeteor.com **TTP Meteor Ltd**

Melbourn Science Park Melbourn Royston Herts SG8 6EE



Wifag-Polytype Technologies is your interdisciplinary R&D partner in all industrial inkjet projects. We offer a broad range of products like printhead electronics or ink supply systems as well as engineering and consulting services, among them inkjet process, web handling, custom software development and mechanical engineering.

Florian Faessler Product Manager Digital Tel: +41 26 426 16 37 Florian.Faessler@wifag-polytype.com www.wifag-polytype.com **WIFAG-Polytype Technologies AG** 26 Route de la Glâne

P.O. Box 1184 CH-1701 Fribourg Switzerland



Xennia Technology provides state of the art industrial inkjet products in the form of systems, modules and inks, bringing the benefits of inkjet technology to original equipment manufacturers (OEM's) and machine partners in ceramics, laminates and wall coverings markets.

Tim Phillips
Marketing & Business Dev. Manager
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Xennia Technology

Monroe House Works Road Letchworth Herts SG6 1LN



Ink Jet Academy

Theory of Ink Jet Technology

angelo Hotel Munich Westpark, Munich, Germany

Monday 22 - Tuesday 23 June, 2015





This one and one half day course has been attended by 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 ink jet technology used today.

Understanding the basics is essential to any industry's development. The Ink Jet Academy covers the basic theory behind the many types of ink jet technology used today and aims to give your understanding of the industry an expert start.

On the course you'll learn how printheads work, what materials are used in their fabrication and the theory of their operation. You'll also find out about inks and media, how they are formulated and used, about supply and support systems.

The course assumes a basic scientific knowledge and is designed to provide useful background information for anyone entering the ink jet industry, seeking an update on today's technology or looking for further fields of development.



Mike Willis, Managing Director Pivotal Resources

Cambridge, UK



Mr. Willis founded Pivotal Resources, a consultancy in the digital printing industry, in 1995. He has experience in a wide range of technologies and markets including dropon-demand and continuous ink jet printing, electro-

photographic technology, greyscale and colour reproduction methods and light sensitive materials.

Mr. Willis was a founder member of Xaar - a spin-off company from Cambridge Consultants where Mr. Willis spent ten years working in a number of roles, culminating as Group Leader of Non-Impact Printing.

Dr. Alan L Hudd, Director & Founder Alchemie Technology

Letchworth, UK



Dr Hudd is Director and Founder of Alchemie Technology Ltd. Alchemie is an independent contract development and consultancy company to the industrial ink jet industry. A particular

research interest is the development of how inkjet can play a role in providing sustainable energy solutions. Alan Hudd was a founder of Xennia Technology and Managing Director from 1996 to 2012. During this period Alan built Xennia to become a world leading inkjet developer and solutions provider to industrial inkjet markets. In 1987, Alan joined Domino Printing Sciences and spent eight years as the Fluids Technology Manager.



Monday June 22, 2015

12:00 - 14:00 Registration 14:00 Course begins

INTRODUCTION TO INK JET

- · Course overview
- · Types of ink jet technology
- Drop on demand technologies
- Thermal & piezo ink jet
- Evolution of ink jet markets
- Ink jet patents

INK JET INK TECHNOLOGIES

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

DOD PRINTHEAD TECHNOLOGIES

- · Thermal ink jet
- Piezo ink jet
 - Piston mode designs
 - Roof mode actuators
 - Stacked piezo technology
 - Shear mode designs
 - Silicon printheads

INK JET 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

8:00 Session closes

18:00 - 19:00 Reception

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

Tuesday June 23, 2015

09:00 Course begins

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

13:00 - 14:00 Lunch

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

INK JET 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 closes

Ink Jet Ink Manufacturing

Manufacturing ink jet inks for performance & reliability

angelo Hotel Munich Westpark, Munich, Germany

Monday 22 - Tuesday 23 June, 2015



COURSE PRESENTERS

Dr Simon Daplyn, Sales Manager - Inks & Consumables

Xennia Technology Limited

Letchworth, Hertfordshire, UK



Dr Simon Daplyn joined Xennia in 2008 and is the Sales Manager for Inks and Consumables, responsible for product sales across the Xennia portfolio of inks. As part of the team that commercialised many products for textiles, Simon

has a particular focus on textile solutions for decoration and functional finishing. Previously Simon was involved in the R&D group overseeing developments of a number of industrial ink jet solutions.

$\label{lem:continuous} \textbf{DrTim Phillips, Marketing \& Business Development} \\ \textbf{Manager}$

Xennia Technology Limited

Letchworth, Hertfordshire, UK



Tim is Marketing & Business Development Manager at Xennia. This has brought him into contact with a wide range of clients working at the leading edge of new applications. These include textiles, printed electronics, deposition of functional

materials, and bio and medical applications as well as the latest graphics applications. Tim graduated from the University of Cambridge in 1991 with an MA Honours degree in Natural Sciences, and completed his PhD in liquid crystal physics and chemistry at the University of Bristol in 1994. He recently completed an Executive MBA at the University of Warwick.

Joseph Ward, VP Marketing & Sales RJA Dispersions IIc



Dr. Ward is one of the owners of RJA Dispersions. He has a unique blend of product and business development experience. When he was at 3M, he led product development for a succession of digital imaging businesses. One, (3M ScotchPrint® System)

grew from startup to over \$100 MM in 5 years. In 2003, he joined an early stage Nano-materials Company as Product Development VP. Since 2006 he has served as VP of Marketing for RJA.



COURSE FOCUS

This course provides a good background of the types of ink jet inks and materials that are used in today's ink jet printers. But how are inks actually made? Is pigmented ink really more expensive to make than dye-based ink? What is involved in manufacturing advanced ink jet inks?

Designed for those wishing to develop, source, or commission the development and manufacture of ink jet inks, the course will help you to understand the issues of development and testing, scale-up for manufacture and the manufacturing processes themselves. As well as being of interest to ink jet technologists, managers will benefit from an understanding of the ink jet ink manufacturing process to set realistic project and revenue plans and to decide whether to manufacture in-house or externally source ink.

Monday 22 June, 2015

12:00 - 14:00 Registration 14:00 Course begins

CRITICAL ASPECTS OF INK JET SYSTEMS DESIGN

- Printheads
- Ink
- Ink systems
- Motion control

INK FORMULATION CONSIDERATIONS FOR MANUFACTURING

- · Ink jet ink ingredients
- · Ink jet ink design & requirements

CREATING ROBUST MATERIAL SPECIFICATIONS

- Dyes
- Pigments
- Polymers
- UV-cure materials
- Functional materials
- Solvents
- Additives

18:00 Session closes

18:00 - 19:00 Reception Join us and enjoy local wines and beers, canapés, and of course good company!

Tuesday 23 June, 2015

09:00 Course begins

TESTING PROTOCOLS & VALIDATION FOR MANUFACTURING

- Optimisation & testingTest schedules
- Protocols
- Testing for reliability & robustness
- Relationship with printer
- Printhead
- Colour Tables
- Ink Management System

QUALITY CONTROL PROCESSES

- · Quality control processes
 - QC laboratory infrastructure
 - QC laboratory equipment
 Scale up for manufacture
- Lab processes
- Pilot plant trials
- SPC parameters

INK PLANT REQUIREMENTS

- Layout
- Equipment selection
- Manufacturing practices
- Quality standards

13:00 - 14:00 Lunch

MANUFACTURING PROCESSES

- · Mixing regimes
 - Water based inks
 - Solvent based inks
 - UV-cure inks
- · Milling processes
 - Filtration systems
- Degassing
 - Purification
 - Bottling
 - Packaging

COMMERCIAL CONSIDERATIONS

- Markets
- Strategies
- Costs
- Positioning
- Value chain

17:00 Course closes



Jetting Functional Fluids

Rheology, Deposition, Process, Development

angelo Hotel Munich Westpark, Munich, Germany

Monday 22 - Tuesday 23 June, 2015



COURSE FOCUS

Whether the functional fluids have electronic, pharmaceutical or other important attributes, the challenges of getting them to "jet" with suitable performance and to "functionalise" on the target substrate are often common headaches for the material deposition community.

In this course we will focus on the practicalities of ink jet printing of what we may call "challenging fluids". We will consider in detail the basic building blocks of a material deposition ink jet system: the ink jet heads, ink, the motion platform, the substrate and methods available to make working printed structures. In addition we will provide a background on how we can fine-tune inks and their jetting waveforms to improve performance. The course will also provide a background on conventional manufacturing capabilities that must be matched for material deposition by ink jet to move into large scale production environments.



"Neil's course is well thought out and comprehensive. Participants can expect to gain quick, time savings benefits with a shortened learning curve. I strongly urge anyone considering inkjet for materials deposition applications to attend." **Stephanie Scattareggia, Fujifilm Dimatix**

LIVE DEMONSTRATIONS

As part of the course, Neil & Steve will be carrying out demonstrations using a Fujifilm Dimatix DMP - your chance to see this deposition platform in action, including built in drop-watcher.



COURSE PRESENTERS



Printed Electronics Limited, Tamworth, UK



Dr Neil Chilton, Technical Director



Dr Steve Jones, Business Development Director

Monday 22 June, 2015

12:00 - 14:00 Registration 14:00 Course begins

THE BASIC COMPONENTS OF AN INK JET SYSTEM FOR FUNCTIONAL FLUID DEPOSITION

HEADS

- · Choice of ink jet heads
- Material compatibility
- Drive electronics and systems
- Selection criteria for ink jet heads

INIVC

- Basic tests for potential ink jet inks and reformulation options
- Jetting methods to evaluate ink performance

INK JET PLATFORM

- Buy or build?
- Fundamental choices when deciding on a system
- Accuracy and compensation methods
- Control software considerations

SUBSTRATE

- Fundamentals of substrates ink interaction
- · Practical substrate characterisation
- · How to optimise your patterning
- · Surface treatment options

FUNCTIONALISING

- Making the printed fluid into the printed "thing" you need
- Thermal vs photonic methods for nano-metal materials
- UV methods for dielectric type materials

18:00 Session closes 18:00 – 19:00 Reception

Tuesday 23 June, 2015

09:00 Course begins

INK JET IMAGE FUNDAMENTALS

- A primer on printing bitmap images (when you really want a nice vector)
- What is a bitmap?
- Encoders and drive systems
- Resolution and image conversion
- Dealing with image artefacts
- Software techniques

INK DELIVERY AND INK MANAGEMENT SYSTEMS

- Filtration, heating/cooling, degassing and ink delivery
- Customised and commercial ink delivery systems

13:00 - 14:00 Lunch

PRACTICAL APPLICATIONS AND CASE STUDIES

- Examples and lessons learnt
- Hands on with ink jet components

MOVING FUNCTIONAL PRINTING TO INDUSTRIAL SCALE

System considerations, yield requirements and cost modelling

AN OVERVIEW OF MATERIAL DEPOSITION AND PRINTED ELECTRONICS USING INK JET - THINGS THAT CAN AND MAYBE CANNOT BE DONE

17:00 Course closes

Full details & registration www.imieurope.com





Week at a glance



THE INK JET ACADEMY COURSE

- Attendance at all sessions
- Copy of course slides
- · One lunch
- One reception
- Coffee breaks

Registration fee €995

INK JET INK MANUFACTURING COURSE

- Attendance at all sessions
- Copy of course slides
- One lunch
- One reception
- Coffee breaks

Registration fee €995

JETTING FUNCTIONAL FLUIDS COURSE

- Attendance at all sessions
- Copy of course slides
- One lunch
- One reception
- Coffee breaks

Registration fee €995

INDUSTRIAL INK JET TECHNOLOGY SHOWCASE 2015

- 4 Ink Jet Tech Talk tutorials
- · 3 Keynote presentations
- · InPrint Industrial Print Forum
- · Conference proceedings
- Two lunches
- · One reception
- · Coffee breaks
- Field trip

Registration fee €595

INK JET INDUSTRY SUPPLIER?

Are you a supplier of products or services to the ink jet industry? Would you like to speak and exhibit at the Ink Jet Technology Showcase 2015?

Full details at www.imieurope.com/IJTS15 or contact either Mike Willis mike@imieurope.com or Al Keene al@imiconf.com and we will explain how to join our event.

Hotel reservations and charges are the responsibility of each registrant - See page 2 for details and our web site for booking details. Special room rate €149 per night 22 & 23 June & €165 24 & 25 June, breakfast, WiFi, & 7% VAT included, subject to availability.

MULTIPLE RATES AND DISCOUNTS

Registrants from the same company attending any Summer School Course or Technology Showcase:

- 1st registrant pays full registration rate
- Same person attending Summer School course + Industrial Ink Jet Technology Showcase 2015 . . €80 discount off normal rate
- Academic rate for Industrial Ink Jet Technology Showcase only €295

You can only recieve one discount per person. German VAT at 19% will be added to all registrations.

BOOKING POLICY

Cancellations will receive a 100% refund of registration fees if made 1 week or more prior to the start of a course or Showcase. After that no refunds will be issued but substitutions may be made at any time - please let us know!

HOW TO REGISTER

Please register on-line via our web site - http://imieurope.com/IJTS15

We will check availability and email you a confirmation registration and an invoice with details of how, when and where to pay. Payment can be made in Euro, GBP or US\$ by bank transfer, or you can pay by credit card in Euro.