IMI EUROPE

Inkjet Summer School 2018

11-15 June 2018

Novotel Gent Centrum Hotel | Ghent | Belgium

The IMI Europe Inkjet Summer School is the ideal way to learn more about key aspects of inkjet technology, from the basics through to advanced courses on inks, printheads and applications.

Inkjet Academy

Theory of inkjet technology

The Inkjet Academy covers the basic theory behind the many types of inkjet technology used today and aims to give your understanding of the industry an expert start. The course is presented by Mike Willis of Pivotal Resources and Dr Alan Hudd of Alchemie Technology.

Digital Textile Printing

Applications, ink chemistry & integration

This course gives an introduction to digital textile printing markets and technology. The main applications for digital textile printing are reviewed, along with the key ink chemistries and integration considerations. Course leaders include the University of Ghent, Sensient Imaging Technologies and Catenary Solutions.

Inkjet Drying & Curing

Hardware & chemistry for fixing inkjet inks

This course provides all the information you need about fixing inkjet inks, covering near-IR drying, UV curing and electron beam curing hardware, as well as the required chemistry. The course includes contributions from Adphos, Phoseon, Ebeam Technologies and IGM Resins.

Inkjet Colour Management

Practical colour management for digital printing

Accurate reproduction of colour is an essential aspect of printing, and the need to ensure true colours can be a limiting factor in digital adoption. This course introduces the key technology and processes required for colour reproduction, presented by ColorGATE.

Inkjet Ink Characterisation

Viscosity, dispersions, jetting & surfaces

This course covers rheology and surface tension measurements, particle and dispersion assessment, as well as drop visualisation and print quality analysis. The course features contributions from industry leaders Malvern Panalytical and ImageXpert.

Jetting Functional Fluids

Rheology, deposition, process & development

In this course you can learn how to develop a functional printing application, including inkjet printhead selection, formulating an ink with functional materials and jetting functional fluids onto a substrate. The course is led by Printed Electronics Ltd.

For more information see **www.imieurope.com**

Inkjet Academy

The Theory of Inkjet Technology

Monday 11 – Tuesday 12 June 2018

COURSE FOCUS

Understanding the basics is essential to any industry's development. The Inkjet Academy one-and-a-half day course covers the theory behind the many types of inkjet technology used today and aims to give your understanding of the industry an expert start.

The course will show you how printheads work, the materials used in their fabrication and the theory of their operation. You will also learn how inks are formulated and used, as well as about ink supply and support systems.

The course examines how drops are formed, travel and behave on the substrate surface. Fundamental aspects of printer operation such as nozzle maintenance and print quality are also covered.

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

Monday 11 June 2018

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

Drop production
- Thermal inkjet
- Piezo inkjet
- Continuous inkjet
- Bulk piezo
- Si-MEMS/TFP
- Deposition requirements
- Drop ejection frequency
- Crosstalk
- Reliability
- Life issues

Inkjet inks
- Inkjet ink design
- Understanding the inkjet printing process
- Drop formation
- Properties influencing piezo inkjet ink performance
- Testing an ink for reliability: methods & characterisation

17:30 Session ends
18:00 - 19:00 Reception
Join us for beers, wines and good company!

Tuesday 12 June 2018

08.30 Course begins

Drops in flight
- Drop placement accuracy
- Drop break-off
- Drop impact and spread
- Mist control

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

System design issues
- Ink supply
- Nozzle maintenance
- Mist control

Substrate & interactions
- Papers and coated papers
- Films, rigid substrates
- Bleed and intercolour bleed
- Pre and post coatings
- Adhesion
- Requirements versus applications
- Drying
- UV curable materials
- Monomers
- Oligomers
- Photoinitiators
- UV curing
- e-beam curing

12.30 – 13.30 Lunch
13.30 Session begins

Print & image quality
- Factors affecting print quality
- Printhead-ink-substrate
- Greyscale methods
- Drop detection
- Banding, single pass issues
- Drying effects
- Missing nozzle detection
- Missing nozzle compensation

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

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

17.30 Course ends

COURSE LEADERS

Mike Willis
Pivotal Resources Limited

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 drop-on-demand and continuous inkjet printing, electro-photographic technology, greyscale and colour reproduction methods and light sensitive materials.

Prior to founding Pivotal Resources, Mike was Director of Electronic Printing at Meta Generics. Mr Willis was a founding member of Xaar - a spin-off company from Cambridge Consultants where he spent ten years working in a number of roles, culminating as Group Leader of Non-Impact Printing. Before that, he spent six years at Gestetner developing photocopiers. Mr Willis graduated from the Polytechnic of Central London with an honours degree in Photographic Sciences.

Dr Alan Hudd
Alchemie Technology Limited

Dr Hudd is Director and co-founder of Alchemie Technology Ltd, 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 Xennia Technology from 1996 to 2012.

Inkjet Colour Management

Practical Colour Management for Digital Printing

Monday 11 – Tuesday 12 June 2018

COURSE FOCUS

Accurate reproduction of colour is an essential aspect of printing, and the need to ensure true colours can be a limiting factor in digital adoption. Central to the task of reproducing colour correctly is colour management - the process by which colour is measured, represented and output by different imaging, viewing and printing devices. The aim is to put in place a system that allows colours to be designed and output in an efficient and accurate manner. The Inkjet Colour Management course introduces the key technology and processes required for colour reproduction, presented by Gerrit Andre of leading digital printing software provider ColorGATE.

Monday 11 June 2018

12:30 - 13:30 Registration
13:30 Course begins

An introduction to colour. Colour management basics

- Colour perception
- Colour communication
- Device colour spaces (RGB/CMYK/CMYK+Gamut extending colours)
- How ICC profiles work
- Rendering intents
- Influence of light / Viewing conditions
- Colour difference metrics – What is Delta E and what does it mean?
- How to communicate colours accurately – CMYK/RGB, Lab and spectral data
- Communicating colours with different file types (TIFF vs. PDF vs. others)

Colour measurement

- Overview of current devices
- Which device should be used for certain applications.
- Is there a "best" device? Hint: no.

17.30 Session ends
18.00 - 19.00 Reception
Join us for beers, wines and good company!

Tuesday 12 June 2018

9:00 Course begins

Printer calibration

- Prerequisite: Know your printer behaviour
- Practical tips for different ink types – UV/solvent/water based
- Influences of screening methods
- Linearization / G7 calibration
- What to look for and what to avoid in order to accurately optimise ink laydown
- Identifying potential measurement issues
- Profiling and profile settings
  - Black generation methods / Ink saver
  - ICC structure
  - Identifying potential problems
  - Evaluation of a profile
  - Gamut viewers and what they can be used for

12:30 - 13:30 Lunch
13:30 Session begins

ICC profiles

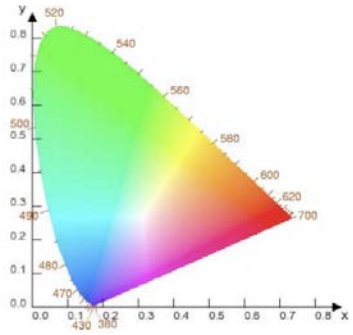
- Input profiles for RGB, CMYK and greyscale
- Impact of input settings (Profiles and Rendering Intents)
- Profile Connection Space or Device Links? What are the differences, what are the benefits?
- Output/printer profile options
- How to setup an automated workflow.

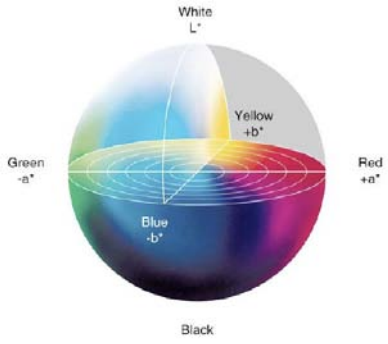
Spot colours in digital workflows

- Dedicated ink channel vs. colour replacement
- What does Pantone coverage mean?
- Assessing the results before printing (Color Preflight)
- Proofing / Softproof

Summary and recommendations - QA

17:30 Course ends





COURSE LEADER

Gerrit Andre
Trainer and Product Specialist, ColorGATE

Gerrit has joined ColorGATE in 2007 and has initially served in the technical service team. Since 2012 he is member of the business development team and performs pre-sale services and consultancy. As a FOGRA certified Digital Printing Expert he acts as a consultant and trainer for workflow and colour management requirements of partners and customers for commercial and industrial digital printing applications.

Ghent Boat Tour

Join us for a boat excursion on the canals that circulate through the beautiful medieval city of Ghent. The tour will be on the evening of 12 June, and is free for all attendees of the Inkjet Summer School.

Inkjet Ink Characterisation

Viscosity, Dispersions, Jetting & Surfaces

Wednesday 13 – Thursday 14 June 2018

COURSE FOCUS

Development of high quality inks and fluids for inkjet applications requires state-of-the-art characterisation equipment and techniques. From fundamental ink properties such as viscosity and surface tension, which have a crucial impact on jetting performance, through analysis of particulates dispersed within the ink, understanding these properties is key to getting the best out of an ink development project. In addition, it is vital to understand how the developed ink actually behaves, both on ejection from the printhead and when landing onto the substrate of choice.

The Inkjet Ink Characterisation course gives an excellent introduction to these essential areas of study, presented by industry experts from leading suppliers and institutions in the field. The course will give you the basic foundations as well as a more detailed understanding of the vital equipment and techniques.

Wednesday 13 June 2018

08:00 - 09:00 Registration
09:00 Course begins

Particle analysis
Sarennah Longworth-Cook, Malvern Panalytical

- Particle analysis - introduction
- Basic techniques
- Pros and cons
- Light scattering - the science
- Practical examples

12:30 - 13:30 Lunch
13:30 Session begins

Basic property measurements - rheology
Dr Adrian Hill, Malvern Panalytical

- Rheology - introduction
- Basic techniques
- Pros and cons
- Theory of measurement
- Rheology in action

17:00 Session ends
18:00 - 19:00 Reception
Join us for beers, wines and good company!

Thursday 14 June 2018

09:00 Session begins

Jetting and print quality analysis
Kyle Pucci, ImageXpert

- Introduction to drop analysis
- How is in-flight analysis used
  - Drop formation
  - Reliability
  - Misting
  - Nozzle-to-nozzle consistency
  - Drop measurement
- Simple application examples
- Overview of techniques
- Fundamental measurements
- Practical demonstration
- Introduction to print quality analysis
- How is print quality analysis used
  - Dot properties
  - Line properties
  - Solid area quality
  - Colour registration
  - Ink interaction
- Overview of techniques
- Practical examples

12:30 Course ends

COURSE LEADERS

Dr Adrian Hill, Product Technical Specialist for Rheometry
Malvern Panalytical

Adrian obtained his PhD from the School of Chemistry at the University of Exeter, where his work involved rheological studies on high particle-loaded dispersions. With over fifteen years working as a rheologist and a strong technical understanding of rheometers, Adrian helps users to get the most out of their instruments by optimizing their rheological measurements. Working with Malvern Panalytical's complementary particle characterization technologies has enabled Adrian to use his background to focus on the properties of dispersed systems – from suspensions and emulsions through to pastes and gels – and help customers understand how the bulk rheology of their materials can be controlled by the properties of the constituent components.

Sarennah Longworth-Cook, Product Technical Specialist - Laser Diffraction
Malvern Panalytical

Sarennah Longworth-Cook has a PhD in Materials Science from the University of Cambridge. After graduation, she spent 9 years working in particle characterisation labs for multinational manufacturers of fine chemicals, catalysts and foods. She has experience in a wide range of analytical techniques, including electron microscopy, surface science, electron and X-ray spectroscopies, and particle size analysis. Sarennah joined Malvern Panalytical in June 2014 in the role of Product Technical Specialist – Laser Diffraction. She provides high-level technical support across the business, to users, product management, marketing and sales functions. Her main focus is ensuring users are empowered to make high quality, meaningful measurements of particle size. Sarennah's favourite application is chocolate.

Kyle Pucci, Applications Engineering Manager
ImageXpert

Kyle is Applications Engineering Manager at ImageXpert Inc. and lives in Nashua, NH USA. He graduated in 2014 from Villanova University with a BS in Mechanical Engineering. He specialises in integrating controllers and hardware with the JetXpert dropwatcher and offering support, installation, and training.

Digital Textile Printing
Applications, Chemistry & Integration

Wednesday 13 – Thursday 14 June 2018

COURSE FOCUS

Over the last decade digital textile printing using inkjet technology has been introduced for a wide range of applications. Many of the technical and material challenges have been overcome, and the increasing emphasis on cost saving, manufacturing flexibility and following market trends is generating a surge of interest.

The course will give an overview of the industry, the markets, applications and technology. The various ink chemistries available will be described, and how they can be used in inkjet printheads. Integration of inkjet technology within a production environment will also be considered, as well as the challenges of inkjet system design to make the processes production-capable.

Wednesday 13 June 2018

08:00 - 09:00 Registration
09:00 Course begins

Digital textile printing technology and applications

Prof Dr em Marc van Parys, University of Ghent

- Segmentation of the market - home textiles, apparel, industrial applications, & soft signage
- Growth of digital textile printing - in the different segments
- Applications and partnership
- Market developments under the influence of digital inkjet printing technology
- Workflow - an important part in production to create or save cost
- Business drivers
- Future directions

12:30 - 13:30 Lunch
13:30 Session begins

Digital textile inks

Dr Claire Glenat, Sensient Imaging Technologies

- Materials selection
- Dyes vs pigments
- Designing ink for industrial printheads
- QC and performance
- Application requirements
- Inkjet printing process
- Designing for digital
- Ink and fabric selection
- Processing requirements
  - Fabric preparation
  - Fixing
  - Washing
- Colour characteristics (ink and print)
- Ink maintenance and support requirements

17:00 Session ends
18:00 - 19:00 Reception

Join us for beers, wines and good company!

Thursday 14 June 2018

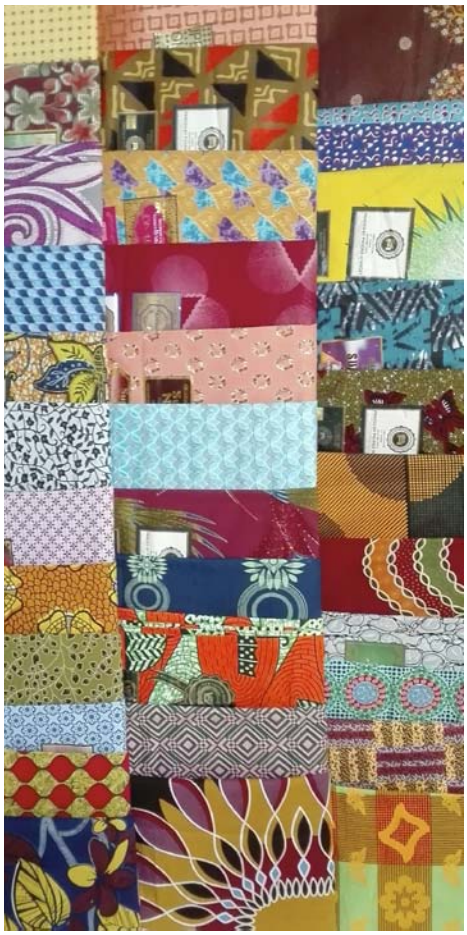
09:00 Session begins

Integration for digital textile printing

Dr Tim Phillips, Catenary Solutions

- Hardware integration
- Printhead technologies
- Printhead choices
  - Suppliers
  - Performance
  - Life issues
- System design
  - Ink supply systems
  - Nozzle maintenance
  - Designing for reliability
- Architecture options
- Printhead motion systems
- Web handling and textile transport
- Testing
- Print quality

12:30 Course ends



COURSE LEADERS

Prof Dr em Marc van Parys, Professor of Textiles
University of Ghent

Prof Van Parys is a Doctor in Chemistry and Professor of Textiles at University College Ghent and University of Ghent. He is Head of the Textile Department and the textile research Lab TO2C. Marc is also president of UNITEX (an SME textile association in Belgium and Netherlands), organiser of international congresses and chief editor of the UNITEX journal. Marc is also a senior consultant and member of the board at Centexbel, and owner and founder of TexZeppelin, a consultancy company covering emerging technologies including digital printing, UV-LED coating/printing, plasma and laser treatment and nanotechnology.

Dr Claire Glenat, Innovation Manager Inks Global
Sensient Imaging Technologies, UK

Dr Claire Glenat is Innovation Manager Inks Global at Sensient. Specialised in polymer chemistry and formulation, she has 15 years experience in the printing industry in the R&D departments of some of the world's leading companies, including Siegwerk and SICPA. She is an expert in offset, flexo, screen and digital printing, especially UV curing technology and colour management. She is experienced with rheology and DSC as analytical techniques for polymer characterisation, as well as use of HPLC-LC/MS, GC-MS and FTIR.

Dr Tim Phillips, Founder & Director
Catenary Solutions, UK

Tim Phillips has extensive experience in challenging inkjet integration projects, spending eight years working at inkjet solutions company Xennia Technology. Projects covered textiles, ceramics, packaging, décor and functional material deposition. Tim is an experienced presenter of IMI Europe courses including Inkjet Academy, Inkjet Ink Manufacturing & Digital Textile Printing. Tim founded Catenary Solutions in 2015 to bring this knowledge of digital solution development and marketing to a wider audience. Tim has a degree in Natural Sciences from the University of Cambridge, and a PhD in liquid crystal physics and chemistry from the University of Bristol.

Inkjet Drying & Curing

Hardware & Chemistry for Fixing Inkjet Inks

Thursday 14 - Friday 15 June 2018

COURSE FOCUS

The Inkjet Drying & Curing course is intended to cover all of the necessary hardware and ink chemistry for fixing inkjet inks. The course will cover drying of aqueous and solvent inks, comparing different possible methods and including near-infrared (NIR) drying, ultra violet light (UV) curing and electron beam (EB) curing. The course covers both hardware and chemistry in detail.

The drying section will review the ink drying process, including adhesion, penetration into the substrate, rub resistance and print quality. The differences in behaviour on porous and non-porous media will be discussed.

Wavelength, absorption characteristics of inks, typical substrates and coatings will also be covered. The advantages and disadvantages of potential ink drying techniques will be reviewed.

The course gives an in-depth introduction to the UV curing process and its relevance to digital inkjet printing. The course introduces the fundamental chemistry and hardware required, assessing the pros and cons of each type available on the market. Finally the emerging technique of EB curing will be introduced, and its potential advantages reviewed.

Thursday 14 June 2018

12:30 - 13:30 Registration

13:30 Course begins

Drying aqueous and solvent inks

James Burbidge, Adphos Innovative Technologies

- Introduction
  - What is dry, and how dry is dry?
  - Ink makeup
  - Differences in inkjet heads and resulting chemistry
- The principles of:
  - Wetting & Setting
  - Absorption in Porous & non-porous Media
- Paper and ink characteristics
  - Spectral absorption of inks
  - Spectral absorption of paper
- Defining durability, liquid removal and measuring it
  - What are we measuring
  - Test procedures
- Comparison of systems
  - Drying processes
  - Dryer designs
  - Homogeneity due to focusing and airflow management
- Application examples
  - Machine layout and its influence

17:30 Session ends

18:00 - 19:00 Reception

Join us for beers, wines and good company!

Friday 15 June 2018

09:00 Session begins

UV curing fundamentals

Rob Karsten, Phoseon Technology

- Introduction to UV curing
  - The UV curing process
- Characterising UV sources
  - Wavelength
  - Peak irradiance
  - Energy density
  - Air-cooled systems
  - Water-cooled systems
- Application areas
  - Full cure
  - Pinning
  - Low migration
- Benefits of UV curing
- Latest advances in UV technology

UV curing considerations

Dr Tim Phillips, Catenary Solutions

- Physics of UV curing
- UV source comparison
- Safety considerations
- Integration challenges
  - Heat management
  - Stray UV
- Oxygen inhibition
- Single pass/multipass systems

12:30 - 13:30 Lunch

13:30 Session begins

Electron beam curing

Dr Elsa Callini, eBeam Technologies

- Introduction to electron beam (EB) curing
  - The EB curing process
  - Chemistry and physics
  - EB Sources
    - Lamps
    - Systems
- Characterising EB Sources
  - Beam current
  - Dose
  - Voltage
  - Power
- Application areas
  - Conventional printing
  - Inkjet printing
  - Coating and varnishes
  - Migration results
- Benefits of EB curing
- Comparison with UV technology
- Future perspectives

UV cure chemistry

Dr Stuart Palmer, IGM Resins

- UV cure mechanisms
  - Free radical
  - Cationic
- Photoinitiator chemistry
- Monomer chemistry
- Oligomers and additives
- Curing issues
  - Oxygen inhibition
  - Other issues
- Print quality effects with UV inks

17:00 Course ends

COURSE LEADERS

James Burbidge, Technical Director Europe - Print Technology
Adphos Innovative Technologies

Rob Karsten, Regional Director EMEA
Phoseon Technology

Dr Tim Phillips, Founder & Director
Catenary Solutions

Dr Elsa Callini, Business Development Manager
Ebeam Technologies

Dr Stuart Palmer, Sales Manager
IGM Resins

Jetting Functional Fluids

Rheology, Deposition, Process & Development

Thursday 14 - Friday 15 June 2018

COURSE FOCUS

There is no doubt that digital deposition of fluids containing functional materials, using inkjet heads is an extremely attractive proposition: being able to place a tiny and highly controlled amount of fluid to a few microns of placement accuracy has the potential to transform conventional manufacturing processes. Whether the functional fluids have electronic, pharmaceutical or other attributes, the challenges of getting them to "jet" with suitable performance and to "functionalise" on the target substrate are common headaches for the material deposition community.

In this course we will focus on the practicalities of inkjet printing of these challenging fluids. We will consider in detail the basic building blocks of a material deposition inkjet system: the inkjet printheads, the ink or fluid, the motion platform and the substrate. We will look at the methods available to create printed structures that deliver the required performance. In addition we will provide a background on fine-tuning inks and their jetting waveforms to improve performance. The course will also provide a sometimes salutary background on the conventional manufacturing capabilities that must be matched for material deposition by inkjet to move into large scale production environments.

COURSE LEADERS

Dr Neil Chilton, Technical Director

Printed Electronics Limited

Neil has more than twenty years' experience in the field of electronics and electronic components. After completing his BSc and PhD in Physics, his technical career took him to Japan where he worked for four years at the advanced materials research division of Nippon Steel Corporation.

After returning to the UK he joined Europe's then largest printed circuit board manufacturing company where he was later part of an MBO team and technical director. In 2006 together with co-founder Dr Steve Jones, he started Printed Electronics Limited to focus on the practical use of inkjet for manufacturing electronic interconnects, devices and systems.

Dr Clare Conboy, Formulation Chemist

Printed Electronics Limited

Clare has more than 20 years' experience of formulating and characterising fluids for spray and printing applications. This includes many years of working with inkjet inks for piezo and thermal DOD printheads, initially for graphics and in recent years for materials deposition applications, including a diverse range of materials including metals, inorganics and adhesives in a range of solvent systems. Following completion of a PhD in Chemistry, she has worked for a number of organisations with a focus on inkjet technology, including Xaar and Plastic Logic. Clare has been involved with Printed Electronics Limited since its establishment.

LIVE DEMONSTRATIONS

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

Thursday 14 June 2018

12:30 - 13:30 Registration

13:30 Course begins

The basic components of an inkjet system for functional fluid deposition

- Heads
  - Choice of inkjet heads
  - Material compatibility
  - Drive electronics and systems
  - Selection criteria for inkjet heads
- Inks
  - Basic tests for potential inkjet inks and re-formulation options
  - Jetting methods to evaluate ink performance
- Inkjet platform
  - Buy or build?
  - Fundamental choices when deciding on a system
  - Accuracy and compensation methods
  - Control software considerations
- Substrate
  - Fundamentals of the substrate – 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

17.00 Session ends

18.00 – 19.00 Reception

Join us for beers, wines and good company!

Friday 15 June 2018

09:00 Session begins

Inkjet 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 artifacts
  - Software techniques

Ink delivery and ink management systems

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

12:30 - 13:30 Lunch

13:30 Session begins

Practical applications and case studies

- Examples and lessons learnt
- Hands on with inkjet components

Moving functional printing to industrial scale

- System considerations, yield requirements and cost modelling

An overview of material deposition and printed electronics using inkjet

- Things that can (and maybe cannot) be done

17:00 Course ends

IMI EUROPE

How to register

Please register on-line via our website:
www.imieurope.com

Registration for the IMI Europe Inkjet Summer School is priced per person, per course, with discounts available if more than one ticket is booked at the same time.

The registration fee includes a lunch during the full day of your course, an evening reception and refreshments during breaks.

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

Number of Tickets	Price per ticket
1	€895
2	€785
3	€715
4	€665
5	€625
6	€590
7	€565
8	€540
9	€520
10	€500

On-site registration is possible, with payment taken in cash and with a €200 addition to the ticket prices above.

Discounts

If you would like a quotation please email **enquiries@imieurope.com** with your requirement. Where multiple discounts apply we will allocate the two largest discounts to the total.

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 28 May 2018). 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.

Location and hotel information

The IMI Europe Inkjet Summer School 2018 will be held at the Novotel Gent Centrum hotel in Ghent, Belgium. The Novotel Gent Centrum hotel is a relaxing haven in the historical city of Ghent. Its central location makes it the ideal base when exploring the city's cultural attractions and shops. A drink on the terrace, a dip in the outdoor pool or a steam in the sauna are just a few of the ways to wind down during your stay.

The IMI Europe Inkjet Summer School is a non-residential course, so accommodation is the responsibility of individual delegates. We have reserved a block of rooms at the Novotel Gent Centrum at a preferential rate for event delegates of €118 per night. Rates include breakfast and WiFi.

To book your accommodation at the hotel with the special rate please use the **linked form** on our website.

Novotel Gent Centrum Hotel
Hoogpoort 52
Postadres: Goudenleeuwplein 5
9000 Gent
Belgium

Tel: +32 9 293 9002
Email: **H0840@accor.com**

	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00
Monday 11 June						Registration	Inkjet Academy				Reception
							Inkjet Colour Management				
Tuesday 12 June		Inkjet Academy				Lunch	Inkjet Academy				Boat trip
		Inkjet Colour Management					Inkjet Colour Management				
Wednesday 13 June	Registration	Inkjet Ink Characterisation				Lunch	Inkjet Ink Characterisation				Reception
		Digital Textile Printing					Digital Textile Printing				
Thursday 14 June		Inkjet Ink Characterisation				Registration	Inkjet Drying & Curing				Reception
		Digital Textile Printing					Jetting Functional Fluids				
Friday 15 June		Inkjet Drying & Curing				Lunch	Inkjet Drying & Curing				
		Jetting Functional Fluids					Jetting Functional Fluids				