The ESMA Inkjet Conference 2015

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Organised by ESMA and developed in partnership with drupa, the recent Inkjet Conference 2015 offered a two day two-track programme of about 49 technical presentations. Focused on the specific demands of system developers and engineers, the event covered the technology behind inkjet printing, showcased the breakthroughs in digital label and package printing and provided a look into the future of this promising technology.

eld for the first time in 2014, the second edition of the Inkjet Conference took place on 7-8th October 2015 in Neuss/Germany and is said to be the largest European inkjet event. With almost 400 participants in total, the event has, by far, broken the attendance record of the last year's edition. Delegates were from 25 countries, mainly European, but also from the USA, Japan, China and India. Two days and two tracks of technical talks packed the presentation rooms and sixty tabletops displays have turned the venue into a networking arena which continued during the dinner on the first day.

Aims of the conference

In general, inkjet as a manufacturing technology was enabled by a new generation of printheads. The improved reliability and nozzle density enabled single pass inkjet printing. However, this is just part of the game, as inks, electronics, software and integration know-how also have had to evolve to match these challenges.

This has led to a high demand for current and up to date information on inkjet technology and inks. The Inkjet Conference fulfills this requirement by bringing together industry and academic players. Moreover, it creates a meeting point for many different industries and market sectors exploring the latest technology and observing how the technology is being adopted in different applications.

The current situation of inkjet

The full impact of inkjet printing has not yet been seen in the label and packaging market and still the core technology continues to evolve at breakneck speeds. Early developments aside, the main breakthroughs occurred with innovations in re-circulating ink sys-

tems and small multi-level drops. This in combination with increased nozzle density and ink improvements has led to high speed, high resolution, and single pass digital label presses. The first generation of machines satisfied market demands for flexibility, the second quickly followed with improvements in image quality.

"The business of tomorrow will not look like the business of today as it will be more IT centric with database management and workflow automation at its core and with inkjet printing being part of automated manufacturing processes. As technology enables a new print process, we see different challenges facing printers", says Steve Knight, CEO of Digital Direct Technologies and co-founder of the Inkjet Conference. "Technologies on show at the conference will be in the print machines of the future, some of them will already be in products unveiled at drupa 2016. There was much talk about thin film piezo and each year we see several new printheads being released and follow their progress into digital print machines and into their adoption by the market", he concludes.

According to Steve Knight, the barriers of "can it be printed with inkjet?" has been passed and now it's a race for improvements and integrating new technologies. Digital print enables a marketing strategy where the run length can be just one. The production process, and hence logistics can all take advantage of the flexibility digital print can bring. Packaging can become customised not just by product, but by store, by season, and even by the weather."

Presentations and tabletop

The Inkjet Conference focused on all aspects of inkjet engineering and inkjet chemistry. Therefore, the speakers presented the technological progress, all which continue to drive today's and future trends ultimately leading to a digital production process that challenges the conventional product marketing.

The line-up of 49 speakers included presentations on new printhead technology, thin film piezo

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and integration of MEMS (Micro Electro Mechanical System) technology into printer applications. Further presentations focused on performance enhancing software developments, electronics, advancements in ink formulations and colorants, as well as advances in integration knowhow. Even more, further lectures focused on curing technologies, laboratory equipment and inkjet-printed organic electronics."

In addition to the presentations, a setting of 60 tabletop displays offered additional and highly appreciated networking opportunities and in-depth discussions with both business and academic exhibitors.

Participant feedback

"It was an excellent mix of suppliers, integrators, customers, both experienced and newcomers", evaluated Marc Graindourze from Agfa. Jochen Christiaens from Atlantic Zeiser summed up: "A fully packed, professional conference offering the opportunity to (re-)connect with key players in the industry and gather impressions on technological trends, the do's and don'ts in inkjet and market development". Leila Ojjeh, Markem Imaje, commented: "Excellent speakers across the inkjet discipline. Great to have a forum focusing on inkjet chemistry." Friedrich Goldner, Marabu, stated: "This second Inkjet Conference was even better than the already good inaugural event in 2014! Why? A wider scope of interesting presentations and larger scale of tabletops for fruitful discussions." Stephen Hoath, University of Cambridge, concluded: "A very enjoyable experience for inkjet researchers wanting a digital view of the graphics printing industry. The networking was exceptional!"

About ESMA

ESMA (European Speciality printing Manufacturers Association) was founded in 1990 as the European association for equipment manufacturers in screen and digital printing. Today, its focus lies on industrial, functional and specialised printing applications, as well as





From left to right: Peter Buttiens, CEO of ESMA and Steve Knight, co-founder of the Inkjet Conference

graphic applications that lead to disruptive developments in printed interior decoration, printed electronics, plastics, textiles and glass. Looking back on the last ten years of activities and the composition of the members, ESMA now has a good mix of screen and digital printing technologies.

ESMA's objectives are to promote adoption and correct use of various specialist printing processes. This mission is realised with multiple conferences (The Inkjet Conference, Direct Container Print, GlassPrint, Advanced Functional & Industrial Printing, Printed Interior Decoration) which deliver technical knowledge and understanding Further activities include involvement in academic projects and research of niche markets.

With over 70 manufacturer members (representing machinery,

equipment, software and consumables sectors) and technology partners (consultants, printers, resellers, developers), ESMA has become a knowledge hub of the industry. The know-how exchange takes place during educational events, workshops and in three committees: Technical Exchange Committee, Health, Safety & Environmental Protection Committee and Marketing & Promotion Committee. Partners and members receive support and advice regarding business trends and solutions, legislation and they all participate in setting industry standards. Peter Buttiens has been ESMA's CEO since 2007 and the association's board is currently chaired by Oliver Kammann from K-Flow GmbH.

The next Inkjet Conference will take place 5–6 October 2016 at the same venue in Neuss.

Sixty tabletops offered additional and highly appreciated networking opportunities



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