

stuttigairt 2019

46th Conference of

iarigai

**International Association of
Research Organizations for
the Information, Media and
Graphic Arts Industries**

**15-18th September 2019
Stuttgart, Germany**

PROGRAM



Day 0 | Sunday, 15th September 2019

17:30-18:00 Registration

18:00-20:00 Welcome Reception ([venue: Motorworld Böblingen](#))

Day 1 | Monday, 16th September 2019 | HdM Hochschule der Medien, Nobelstr.10

08:30-9:00 Registration Partner program:

OPENING SESSION

Chair: Gunter Huebner | lecture hall audimax 011

09:00-09:15 Opening address of the conference, Prof. Dr.-Ing. Gunter Huebner

09:15-09:30 Welcome addresses HdM, Director Prof. Dr. Alexander W. Roos

SESSION 1 (Plenary), Keynotes

Chair: Gunter Huebner | lecture hall audimax 011

09:30-10:00 Sonja Mechling – Chief Marketing Officer Heidelberg Digital Unit:
Digital transformation in the print media industry – how to drive the change?

10:00-10:30 Peter Sommer – Elanders, President Print & Packaging Worldwide
How to make money with digital print?

10:30-11:00 Coffee break (foyer)

11:00-11:30 Robert Lindner – Organic and Printed Electronics Association OE-A: *Flexible technology for flexible markets: Trends in organic and printed electronics*

11:30-12:15 Joerg Hunsche, Lars Bertenbreiter – Market Development Manager HP Deutschland GmbH, Germany: *The revolution of consumer communication and industrial production with HP Technologies*

12:15-12:25 Official photo

12:30-13:30 Lunch (foyer)

SESSION 2A

Printing Processes I: Screen-Printing

Chair: Li Yang | lecture hall 011

SESSION 2B

Colour Science

Chair: Ian Baitz | lecture hall 012

13:30-14:00 Karim A. Aal, Ceren Yüce Norbert Willenbacher – KIT Karlsruhe, Germany: *Video capturing of the paste transmission process during screen printing – The impact of paste rheology on the screen printing process*

Michael A. Pedersen – The Danish School of Media and Journalism, Copenhagen, Denmark: *Reinventing the wheel. An attempt to create an objective technical color wheel for Pantone colors by using hue angles (h_{ab}) as the deciding factor.*

14:30-14:30 Sarah-Jane Potts, Chris Phillips, Tim Claypole – University of Swansea, UK: *High speed imaging of ink separation in screen-printing*

Marc Hunsänger, Armin Weichmann – Bergische Universität Wuppertal, Germany, Hochschule der Medien, Stuttgart, Germany: *Conditions for Colorimetric RGB-Luminescent-Printing*

14:30-15:00 Gunter Huebner, Andreas Willfahrt, Christoph Heckel, Erich Steiner, Florian Nufer, Jonas Hötzel – Hochschule der Medien, Stuttgart, Germany: *Screen printed supercaps using hydrogels as electrolyte*

Jennes Hünninger, Simon Hamblyn, Lutz Engisch – HTWK Leipzig, University of Applied Sciences, Germany: *Influence of colour and gloss on the visual perception of embossed prints*

15:00-15:30 Coffee break (foyer)

SESSION 3A

Printing Processes II: Gravure and print inspection

Chair: Patrick Gane | lecture hall 011

SESSION 3B

Print Quality, Perception of Prints, Evaluation Techniques

Chair: Erzsébet Novotny | lecture hall 012

15:30-16:00 Thorsten Bitsch, Julian Schäfer – TU Darmstadt, Germany: *Innovative experimental setup enables in situ investigation of doctor blading process*

Michael Has – PAGORA, Saint-Martin-d'Hères, France: *Designing an industrial product following criteria for circular economy. What product designers should consider - a case study based on a printing press*

16:00-16:30 Thorsten Bitsch, Julian Schäfer, Elisabeth Diehl, Hans Martin Sauer, Edgar Dörsam, Stefan Ulbrich – TU Darmstadt, Germany: *An experimental and numerical cooperative research concept for doctor blading*

Anastasios Politis, Kenneth Macro, Georgios Gamprellis, Christos Trochoutsos, Marios Tsigonias – University of West Attica and HELGRAMED Greece, California Polytechnic State University, USA: *Matching lean manufacturing and industry 4.0 for the graphic communication – printing industry*

16:30-17:00 Mustafa Bilgin, Johannes Backhaus – University of Wuppertal, Germany: *Smart materials detection using computer vision*

Ulrich Nikolaus, Marie Olschowsky, Nadine Wittenberg – Leipzig University of Applied Sciences (HTWK Leipzig), Germany: *Cigarette packaging: Visual impact of shock pictures and embossment at the point of sale*

17:00-17:30 Coffee break (foyer)

17:30-18:30 General Assembly (representatives only)

18:30 No program (at own leisure)

Day 2 | Tuesday 17th September 2018 | HdM Hochschule der Medien, Nobelstr.10

SESSION 4A

Printing Processes III: Digital and 3D-printing

Chair: Fritz Bircher | lecture hall 011

SESSION 4B

Packaging

Chair: Branka Lozo | lecture hall 012

09:00-09:30 Noreen Zönnchen – TU Chemnitz, Germany: *Bioprinting of thick, vascularized tissues by inkjet-technology*

Alexandra Pekarovicova, Dipesh Sonar, Rahul Pingale, Veronika Husovska, Paul Fleming – Western Michigan University, USA: *Soy protein fluid inks for packaging*

09:30-10:00 Ben Clifford, Chris Phillips, Davide Deganello – Swansea University, UK: *Optimisation of aerosol jet deposition for high-resolution selective patterning of silver tracks*

Klaudia Palova, Csaba Horvath, Viktor Vetesi – Óbuda University, Budapest, Hungary: *Investigation of relationships between light and weather resistance of flexible packaging materials applied outside depending from applied inks and surface treatments*

10:00-10:30 Nathan Ostrout, Shu Chang – Clemson University, Greenville, USA: *Effect of print parameters on the accuracy of part dimensions from a fused deposition modelling 3D printer*

Lars Granlöf, Li Yang – RISE (Research Institutes of Sweden), Stockholm, Sweden: *Techniques for static, dynamic and surface compressibility measurements of paper substrate*

10:30-11:00 Coffee break (foyer)**SESSION 5A****Functional Printing and Wearables**
Chair: Anne Blayo | lecture hall 011**SESSION 5B****Printing Processes IV: Offset, Specialty Substrates, Inkjet****Chair: Armin Weichmann | lecture hall 012**11:00-11:30 Tim Claypole, James Claypole, Alex Holder, Caitlin McCall, Amy Winters, William Ray – Swansea University, UK: *Inorganic printed LEDs for wearable technology*Urška Kavčič, Igor Karlovits – Pulp and Paper Institute, Ljubljana, Slovenia: *Invasive plant-based paper as a substrate for electroconductive printing inks*11:30-12:00 Tim Claypole, Andrew Claypole – Swansea University, UK: *Flexible and stretchable inks for wearable applications*Pal Gorgenyi-Toth, Csaba Horvath, Laszlo Koltai – Óbuda University, Budapest, Hungary: *Study of colour change in the course of drying on prints created using offset printing technology*12:00-12:30 Tomas Syrový, Stepanka Kosova, Mario Krajcir, Ladislav Mensik, Lucie Syrova – University of Pardubice, Czech Republic: *Conformal printing of functional structures on 3D shaped objects and techniques for creation of related 3D models*Jianlong Xiang, Zhihong Wang, Linlin Liu, Yujia Liu, Yixue Xie – Hangzhou Cron Machinery & Electronics Co, LTD, Xi'an, China: *Printing color control based on intelligent ink supply system*

12:30-13:00

Slavtcho Bonev, Sviatoslav Voloshynovskiy – University of Geneva, Switzerland: *Fast and precise nozzle line measurement for industrial digital printers: amplitude and phase estimation in undersampled nozzle patterns***13:00-14:00 Lunch (foyer)**

14:00-15:00 Tour in groups through HdM

15:00-15:30 Coffee break (foyer)**CLOSING SESSION****Chair: Gunter Huebner | lecture hall audimax 011**

15:30-16:00 Wrap up and presentation of next conference venue

16:00 End of conference

17:00 Transfer by shuttle from HdM to Mercedes Museum

18:00 Mercedes Museum Stuttgart Tour**19:00 Dinner at Mercedes Museum**

After dinner Transfer by shuttle back to HdM

Day 3 | Wednesday, 18th September 2019

09:00 Departure for industrial visit

10:00 Visit of Elanders

12:00 Return to HdM