

The NIP29

29th International Conference on
Digital Printing Technologies

Digital Fabrication 2013 Conference

September 29 - October 3, 2013
Seattle, Washington

*Printing as
Part of Something
Bigger*



General Chairs:
Steve Simske, Hewlett-Packard Laboratories, and
Werner Zapka, XaarJet AB

www.imaging.org/ist/conferences/nip

Abstract Deadline:
March 3, 2013



Sponsored by the
Society for Imaging Science and Technology (IS&T) and the
Imaging Society of Japan (ISJ)

*. . . survival depends on our ability to stay awake,
to adjust to new ideas, to remain vigilant,
and to face the challenge of change.*

—Martin Luther King, Jr.

Be a part of our change this September in Seattle! The NIP/Digital Fabrication Conference is Evolving

*Science always has its origin in the adaptation of thought
to some definite field of experience.*

—Ernst Mach

***We are all experiencing how the world of digital printing is shifting, and we're committed to
adapting the NIP/Digital Fabrication Conference to meet your changing needs.***

We're envisioning a new NIP/Digital Fabrication Conference. One that meets your needs to connect better with other attendees; encourages engagement in conversations that lead to breakthroughs; and allows you to get the information you need to do your job better in the evolving world of digital printing, imaging, and fabrication!

To that end, the NIP29/Digital Fabrication 2013 Conference will:

- be organized into tracks and sessions based on the topical area of the paper, whether its content is more aligned with digital printing or fabrication to increase synergy;
- encourage papers that talk about novel research and applications, including talks about printing/fabrication opportunities in different business sectors, including those represented by smaller companies and start-ups;
- schedule more collaborative sessions that allow for greater sharing of information, such as roundtables, panels, and group discussions;
- provide more opportunities for exhibitors to showcase their products/services;
- offer new courses that are location-based, application/industry-focused, more of a practical/workshop nature, and/or untraditional in their format;
- help students access the conference by holding a special event for them, increasing the number of local student attendees, and connecting them with experts in their field; and
- take advantage of the Seattle location to invite speakers from local industries to speak at the conference and offer relevant tours to attendees of local facilities.

We hope you'll find that these changes continue to make your conference experience dynamic, useful, and productive.

—The NIP29/Digital Fabrication Conference Committee

SUBMISSIONS IN THE FOLLOWING AREAS ARE ENCOURAGED:

Printed Electronics/Digital Fabrication: Printing as an “enabling” technology to produce functionality, industrial, and commercial digital fabrication; Digital manufacturing of displays, electronics, solar cells, and lighting; 3D printing; Printing of bio/medical/pharma materials; “Lab-to-Fab” issues, approaches, and solutions.

The Physics, Chemistry, and Materials of Printing: Hardware for printing inspection, authentication, and forensics; Toner-based printing processes and materials; Print media; Color science; Image processing; Fusing, curing, and drying; Image permanence; Print and image quality; Inkjet printing processes and materials; Laser patterning processes; Formulation of nano-particles inks; Nano patterning/imprint technologies; Hybrid printing technologies; Digital fabrication instrumen-

tation; Photoelectronic imaging materials and devices; Process materials and substrates for digital fabrication/printed electronics; Pre- and post-processing for digital material deposition.

Digital Workflows: Printing services and solutions; RIP and pre-press solutions; Digital finishing; Digital printing fulfillment; Printing systems engineering/optimization; Advanced and novel imaging systems; Design of print patterns.

Printing Applications: Security and forensic printing; Textile and fabric printing; Commercial and industrial printing; Electronic paper and paper-like displays; Printed electronics and devices; Smart packaging applications; Printing of functional materials; Thermal printing; Actionable printing for mobile devices.

How to Submit

Submission Deadline: March 3, 2013

www.imaging.org/IST/newpapers/2013NIP_DF/authors

Please read the submission criteria carefully as it has changed from past years.

To submit a technical paper representing original work in the science and/or technology related to digital printing or fabrication, *you must choose between an oral or an interactive paper submission. For either, submit the following* to the web address noted above:

- Complete contact information for author(s)—full name(s), company, address, phone/fax numbers, and email—and indicate topical area of paper
- Up to 75-word biographical sketch of the principal author

PLUS

for consideration as an oral presentation

- An extended abstract of 3 pages (approximately 1500 words) clearly stating the technical content of the paper, the methods, and conclusions; if appropriate, emphasize what is new compared to previously presented/published results

OR

for consideration as an interactive presentation

- An abstract of approximately 200 words clearly stating the technical content of the paper and, if appropriate, emphasizing what is new compared to previously presented/published results

Accepted papers (4-6 pages) will be published in the conference proceedings. Papers are due in electronic form by **July 9, 2013**. Please direct all submission inquiries to Diana Gonzalez at 703/642-9090, NIP_DF@imaging.org.

Keynote Talks

Keynote addresses by leaders in the industry and related scientific fields are a highlight of the conference. Keynotes provide attendees with broader context on industry-wide issues, important technical achievements, and international market trends. This year's keynotes will focus on how the relevance of printing and imaging continues to grow as these technologies transform existing and create new commercial ecosystems of value—in other words, we will look at how printing systems are not only stand-alone, but part of something bigger.

Special Topics

A number of special topic sessions featuring invited presentations by experts in key areas related to digital printing and imaging will survey recent developments and present new contributions. These sessions give conference participants an invaluable opportunity to learn more about emerging and core technologies in these areas:

- The newest developments in 3D printing and capturing
- Digital biofabrication and related Life Science applications
- Design for environmental sustainability
- Digital and smart packaging
- High-speed and roll-to-roll ink jet
- Living printing and ecosystems
- (Mathematical) Modeling for printing and related processes
- Web and cloud printing

Technology Roundtables

Special Technology and Application Roundtables are being planned for NIP29/Digital Fabrication 2013. Do you have a topic you would like to discuss with leading experts from industry and academia? Send ideas to NIP_DF@imaging.org

Invitation to Exhibitors

Join us in Seattle! Let digital printing and fabrication industry leaders and technical experts see your products and services.

A highlight of the conference, the exhibit features industry-leading companies and their state-of-the-art printing products and applications, including materials, inks/toners, papers, films, textiles, and test equipment.

2013 will feature short talks by exhibitors explaining their products/services.

For information, please contact Donna Smith (dsmith@imaging.org). The exhibit runs October 1–2. Early exhibitor registration rates are in effect until June 15, 2013.

Short Courses

The conference offers an extensive array of short courses taught by world-renowned experts on a wide range of subjects related to digital printing technologies. Courses this year will mostly be 2-hours in length and held on Sunday, September 29.

Past classes have included Introduction to Digital Fabrication, Printed Electronics, Printing Biomaterials, Digital Fabrication Machinery, Industrial Ink Jet Technology for Printing and Fabrication, and Desktop Ink Jet Products Performance.

In addition to the traditional types of course offered in past years, **we are looking for instructors/experts to offer location-based and application/industry-focused classes or workshops.** We are also looking for classes with a hands-on, practical nature, and/or untraditional format.

Short courses will be published in the Preliminary Program. Those interested in offering a workshop or course should send a proposal to NIP_DF@imaging.org.

The Venue Seattle, Washington

The NIP29/Digital Fabrication 2013 Conference takes place at The Westin Seattle (www.westinseattle.com). Centrally located on the shores of Puget Sound, Seattle is a vibrant and beautiful city.

The Westin Seattle is within walking distance of Pike Place Market and the monorail, which you can take to the famous Space Needle.

There's more to Seattle than just great coffee. Home to some of America's most inventive companies—Boeing, Microsoft, Amazon, Starbucks, Drugstore.com, Nordstrom, Eddie Bauer, and REI, to name a few—the city has a rich Native American, Asian, and Nordic cultural heritage, with museums that celebrate that legacy. The conference program will include social events and tours that allow attendees to explore both the commercial and cultural highlights of this engaging city.

Sea-Tac International Airport (SEA) is a 30-minute drive from the hotel venue. There are 21 international destinations served by SEA. For information, visit www.portseattle.org/Sea-Tac.

Conference Committee

General Chairs

Steven J. Simske, Hewlett-Packard Laboratories
Werner Zapka, XaarJet AB

Publications Chairs

Masahiko Fujii, Fuji Xerox Co., Ltd.
Branka Lozo, University of Zagreb

Program Chairs

Asia & Oceania

Teruaki Mitsuya, Ricoh Company, Ltd.
Koei Suzuki, Ricoh Company, Ltd.

Europe/Middle East

Mark Crankshaw, Xaar plc
Paul Drury, Xaar Technology Limited

The Americas

Thomas Boland, University of Texas El Paso
George A. Gibson, Xerox Corporation

Special Papers/Topics

James W. Stasiak, Hewlett-Packard Company
Marie Vans, Hewlett-Packard Company

Publicity Chairs

Asia & Oceania

Seogsoon Kim, Unijet Co., Ltd.
Shuichi Maeda, Tokai University

Europe/Middle East

Patrick Smith, University of Sheffield

The Americas

Stan Farnsworth, NovaCentrix
Eric Stelter, Lexmark International, Inc.

Special Topics

Steven V. Korol, Memjet

Interactive Session Chairs

Ligja Bejat, Lexmark International, Inc.
Dietmar Zipperer, PolyIC GmbH & Co. KG

Short Course Chairs

Robert Harvey, AtomJet Ltd.
Devon J.V. Strain, Lexmark International, Inc.

Print Gallery/Demonstration Session Chairs

Susan Farnand, Rochester Institute of Technology
Jolke Perelaer, Friedrich-Schiller-Universität Jena

University Liaison Chair

Trevor Snyder, Xerox Corporation

Audio-Visual Chair

Steven V. Korol, Memjet

Advisory Chairs

Paul Benning, Hewlett-Packard Company
Hiitoshi Nakai, Brother Industries, Ltd.

Keep up-to-date on the details of these meetings! Join the
NIP (Digital Printing)/Digital Fabrication Conference Group on LinkedIn!