#### The Conference

Join us in Quebec City, Canada, for the 28th International Conference on Digital Printing Technologies and Digital Fabrication 2012!

For 28 years, NIP has been the leading forum for discussion of technological advances, cutting-edge applications, and new directions in non-impact and digital printing technologies.

Researchers from industry and academia learn about and present the latest scientific and technical advances in their fields. These include ink jet printing systems and materials, toner-based electrophotographic systems and materials, electronic paper and paper-like displays, advanced and novel imaging systems, print quality, as well as a special focus on design for environmental sustainability.

This conference is also a place for the industry to discuss and present the latest advances in non-impact printing applications allowing the community to address new and growing markets: web and cloud printing, RIP and pre-press solutions, digital workflows, living printing and ecosystems, digital and smart packaging, commercial and industrial printing, high-speed and roll-to-roll ink jet, textile and fabric printing, security and forensic printing, and hardware for printing inspection and authentication among others.

Digital Fabrication is once again collocated with NIP28 and continues to explore the expanding potential of digital printing technologies that go well beyond traditional printing methods. Digital Fabrication techniques are now used for biomedical applications as well as to produce MEMS and new electronic devices. Collocation of these two preeminent meetings gives attendees access to more than 250 papers spanning the topics described in this pamphlet, from commercial/industrial printing and image permanence to 3D printing, printing of biological materials, and printed electronics. It also offers attendees greater potential and promise for expanding professional networks and knowledge bases.

#### **Keynotes**

A highlight of the conference is keynote addresses by leaders in the industry and related scientific fields. Keynotes provide attendees with a broad perspective on industry-wide issues, important technical achievements, and market trends. This year's keynotes will look at digital printing advances introduced at DRUPA, the implications for digital printing until 2016, and 3D digital manufacturing.



# Digital Fabrication 2012

September 9-13, 2012

Quebec City, Quebec, Canada

Abstract Deadline: February 12, 2012

www/imaging.org/ist/ newpapers/2012NIP\_DF/authors

Join the NIP (Digital Printing)/Digital Fabrication
Conference group on LinkedIn!

General Chair:
Paul Benning
Hewlett-Packard Company

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



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## **Join us in**

**PAPERS** 

Quebec City, Quebec, Canada Join us in one of the oldest cities in North America!

The Venue

NIP28/Digital Fabrication 2012 will take place at the Quebec City Convention Centre located just outside the gates of the fortified Vieux-Quebec (Old Quebec)—a UNESCO World Heritage Site. Set on the banks of the St. Lawrence River, Quebec City was recently named the sixth best destination worldwide and third best in North America by Conde Nast Traveller.

This charming and historic city has much to offer from the Old Port Market to wonderful boutiques, first class restaurants, lovely parks, and lively streets. Relics of the French and Indian Wars abound; indeed The Musee National des Beaux-Arts du Quebec —a former prison—now houses art from around the world. A taste of the area's magnificent wilderness is less than 30 minutes away. For more information on all the city has to offer, visit www.quebecregion.com.

The Jean Lesage International Airport (YQB) is a 15-minute drive from downtown Quebec City. There are direct flights from Chicago, Newark, Montreal, Paris, Philadelphia, Toronto, and other cities. For more information, visit www.aeroportdequebec. com/en/.

### Participate in the Print Sample Gallery or Demonstration Session!

Display samples of the latest printing technologies or techniques your company has to offer in the Print Sample Gallery. Or if you're an author, use time during the Demonstration Session to show products, software programs, algorithms, or other exhibits related to your paper.

The up-close, detailed look at performance and other capabilities, the relative advantages of various printing technologies on paper and traditional media, and the fabrication of objects digitally, provides a wonderful opportunity for attendees to interact, network, and to see and touch samples that speakers or others have displayed, fostering a unique exchange of ideas.

Those interested in participating should contact Susan Farnand (NIP) or Jolke Perelaer (DF) at NIP\_DF@imaging.org.

Papers presented at NIP/DF may also be submitted for publication in an IS&T peerreviewed journal. Contact IS&T for more information.

#### **Conference Committees**

#### NIP28

General Chair Scott Silence Xerox Corporation

#### Publications Chair

Steven J. Simske Hewlett-Packard Laboratories

#### Program Chair (The Americas)

George A. Gibson Xerox Corporation

#### Program Chair (Asia & Oceania)

Hitoshi Nakai Brother Industries, Ltd.

#### Program Chair (Europe/Middle East)

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#### Publicity Chair (Asia and Oceania)

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#### Publicity Chair (Europe/Middle East)

#### Publicity Chair (Special Efforts)

Eric Stelter Lexmark International, Inc.

Lexinark international, inc

#### Interactive Session Chair

Devon J.V. Strain Lexmark International, Inc.

#### **Short Course Chair**

Steve Korol Xerox Corporation

#### Print Gallery Chair

Susan Farnand Rochester Institute of Technology

#### **Exhibit and Sponsorship Chair**

Jack Flynn Baker Hughes

#### **Audio-Visual Chair**

Steven V. Korol Xerox Corporation

#### **Digital**

#### **Fabrication**

#### 2012

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#### Publicity Chair (Europe/Middle East)

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Dietmar Zipperer PolvIC GmbH & Co. KG

#### **Short Course Chair**

Robert Harvey Atomjet, Ltd.

#### **Print Gallery Chair**

Jolke Perelaer Friedrich-Schiller-Universität Jena

#### **Advisory Chair**

Shinri Sakai

Seiko Epson Corporation

#### TECHNICAL PAPER SUBMISSIONS IN THE FOLLOWING AREAS ARE ENCOURAGED:

#### **NIP TOPICS**

NIP CORE TOPICS (core science and technologies that underlie non-impact digital printing, where researchers from industry and academia can learn about, and present, the latest scientific and technical advances in their fields):

- Advanced and novel imaging systems
- Color science/image processing
- Electronic paper and paper-like displays
- Fusing, curing, and drying
- Image permanence
- Ink jet printing: Materials
- Ink jet printing: Processes
- Media for digital printing
- Photoelectronic imaging materials and devices
- Print and image quality
- Printing systems engineering/optimization
- Thermal printing
- Toner-based printing: Materials

Toner-based printing: Processes

NIP APPLICATIONS (applications of non-impact printing, highlighting advances in performance and economics as well as expanding technical capabilities that allow digital printing to address new market opportunities and spaces):

- Commercial and industrial printing
- Digital finishing
- Digital printing fulfillment
- Hardware for printing inspection, authentication, and forensics
- Printing technologies: Technical reviews and new introductions
- Printing services and solutions
- RIP and pre-press solutions
- Security and forensic printing
- Textile and fabric printing

#### Invitation to Exhibitors

We're expecting more than 500 digital printing and fabrication industry leaders and technical experts to gather in Quebec City, Quebec, Canada for NIP28/Digital Fabrication 2012. A highlight of the conference, the exhibit features industry-leading companies showcasing state-of-the-art printing products and applications, including materials, inks and toners, papers, films, textiles, and test equipment.

If you would like to exhibit please contact Exhibit Chair Jack Flynn (jack.flynn@bakerhughes.com) or IS&T staff liaison Donna Smith (dsmith@imaging.org). The exhibit will run September 11 and 12. Early exhibitor registration rates are in effect until June 15, 2012.

#### DIGITAL FABRICATION TOPICS

- Printing of functional materials
- Printed electronics and devices
- 3D printing
- Printing of bio/medical/pharma materials
- Industrial and commercial digital fabrication
- Smart packaging applications
- Inkjet printing processes
- Laser patterning processes
- Nano patterning/imprint technologies
- Combinations of digital fabrication technologies/ hybrid technologies
- Pre- and post-processes for digital material deposition
- Process materials and substrates for digital fabrication
- Digital fabrication instrumentation
- "Lab to Fab" aspects

#### **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
- Design for environmental sustainability
- Digital and smart packaging
- Digital workflows
- High-speed and roll-to-roll ink jet
- Living printing and ecosystems
- (Mathematical) Modeling for printing and related processes
   Printing technologies: Technical reviews and new introductions
- (DRUPA)Printing services and solutions
- Web and cloud printing

#### **Panel Discussions**

A special Technology and Application Roundtable panel is being planned for NIP28/Digital Fabrication 2012. *Do you have a topic you would like to discuss with leading experts from industry and academia? Contact Branka Lozo via NIP\_DF@imaging.org* 

#### How to Submit: NEW CRITERIA

Submission Deadline: February 12, 2012 www.imaging.org/IST/newpapers/2012NIP 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 digital fabrication, you must choose between an oral or interactive paper submission. For either submit the following to the www address noted above:

- Complete contact information for author(s): full name(s), company, address, telephone, fax, and email
- up to 75-word biographical sketch of the principal author
- Preferred session assignment

#### PIUS

#### 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

#### ١D

#### 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

The full text of accepted papers will be published in the conference proceedings. This text is due in electronic form by **June 19, 2012**. Please direct all submission inquiries to Diana Gonzalez at 703/642-9090, NIP\_DF@imaging.org.

#### **Short Courses**

The conferences will offer an extensive array of short courses taught by world-renowned experts on a wide range of subjects related to digital printing technologies. Past classes include 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. Attendees are certain to find short courses that introduce them to new fields and keep them up to speed on the latest developments! Short courses will be published in the Preliminary Program. Those interested in teaching a short course should send a note to NIP\_DF@imaging.org.

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