Digital Fabrication 2011

October 2-6, 2011

Minneapolis, Minnesota

Abstract Deadline: March 6, 2011

www/imaging.org/ist/
newpapers/2011NIP_DF/authors

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

General Chair:
Shinri Sakai
Seiko Epson Corporation

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

The Conference

Join us in Minneapolis, Minnesota, for the 27th International Conference on Digital Printing Technologies and Digital Fabrication 2011!

For 27 years, NIP has been the leading forum for discussion of technological advances 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, thermal printing systems, electronic paper and paper-like displays, advanced and novel imaging systems, media for digital printing, 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 nonimpact printing applications allowing the community to address new and growing markets: web and cloud printing, RIP and prepress solutions, digital packaging, commercial and industrial printing, high speed ink jet, textile and fabric printing, security and forensic printing, and hardware for printing inspection and authentication among others.

Digital Fabrication is once again colocated with NIP27 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.

Call for Papers

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General Chair:
Xavier Bruch
Hewlett-Packard Española

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The Venue

Minneapolis, Minnesota, the “City of Lakes,” located in the heart of North America!

NIP27/Digital Fabrication 2011 will take place at the Hilton Minneapolis, conveniently located in the center of downtown and within easy walking distance of many restaurants, tax-free shopping, theaters, and excellent museums.

Minneapolis—one of the “Twin Cities” along with St. Paul— is located along the banks of the Mississippi River. The city boasts 22 lakes, and many beautiful parks with walking trails. One of the US’s cleanest and safest cities, it is home to the famous Mall of America, which has 520 stores, 50 restaurants, and the nation’s largest theme park. The Walker Art Center is one of the best contemporary art museums in the country and more than 400 artists live in the Northeast Minneapolis Art District. In fact, Minneapolis is second to New York in total number of museums, live theaters, art exhibits, and music venues in the US.

Minneapolis is also home to The University of Minnesota, which ranks among the top ten public research institutions in the US and seventh in total research. For more information on the city, visit www.minneapolis.org/.

The Minneapolis/St. Paul International Airport (MSP) is 12 miles from the hotel—a 20 minute drive. Minneapolis is less than three hours flying time from most US cities with nonstop flights from a number of US and international cities, including Atlanta, Chicago, London, Los Angeles, Newark, New York JFK, Paris, Tokyo, and Washington. More information can be found at www.mspairport.com/airlines.aspx.

The Minneapolis/St. Paul International Airport (MSP) is located in the heart of North America—only two hours by airplane from Chicago, London, Los Angeles, Newark, New York JFK, Paris, Tokyo, and Washington. More information can be found at www.mspairport.com/airlines.aspx.

Invitation to Exhibitors

We’re expecting more than 500 digital printing and fabrication industry leaders and technical experts to gather in Minneapolis for NIP27/Digital Fabrication 2011. 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 October 4 and 5. Early exhibitor registration rates are in effect until June 15, 2011!
NIP27 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
  - Design for environmental sustainability
  - Electronic paper and paper-like displays
  - Fusing, curing, and drying
  - Image permanence
  - Ink jet printing: Materials
  - Ink jet printing: Processes (Mathematical) Modeling of printing and related processes
  - Printing technologies: Fabrication, Materials
  - 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 packaging
  - Digital printing fulfillment
  - High speed ink jet
  - Hardware for printing inspection authentication and forensics
  - Printing technologies: Technical reviews and new introductions
  - Printing services and solutions
  - Security and forensic printing
  - Textile and fabric printing

**Digital Fabrication Topics**

- Printed electronics and devices
- Sensors, photovoltaic cells, and lighting
- Bio- and pharmamaterials
- Digital biofabrication
- 2- and 3D functional printing
- Smart packaging applications
- Industrial and commercial digital fabrication
- Ink jet processes
- Laser patterning processes
- Nano patterning and imprinting
- Dip pen lithography
- Combined digital fabrication technologies/hybrid technologies
- Pre- and post-processes for material deposition
- Toner/inkjet printed functionalities
- Process materials and substrates
- Instrumentation
- Analysis of digitally fabricated patterns and structures
- Phenomenological studies of digital fabrication processes
- DF product quality
- Issues in transfer from lab to fab

**Special Topic Sessions**

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:

- Digital fabrication enabled smart packaging
- On-line printing of RFID antennas on cardboard, smart labels for authentication of high value consumables, printable sensors or transducers for pharmaceutical packaging, and printable sensors or food packaging
- Design for environmental sustainability
- Digital packaging
- Security and forensic printing
- Hardware for printing inspection authentication and forensics
- Modeling for printing and related processes
- Printing technologies: technical reviews and new introductions
- Printing services and solutions

**Panel Discussions**

A special Technology and Application Roundtable panel is being planned for NIP27/Digital Fabrication 2011.

**How to Submit**

Submission Deadline: March 6, 2011

www.imaging.org/IST/newpapers/2011NIP_DF/authors

To submit a technical paper representing original work in the science and/or technology related to digital printing or digital fabrication, send the following to the www.address listed above:

- 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
- Complete contact information for author(s): full names, company, address, telephone, fax, and email
- up to 75-word biographical sketch of the principal author
- Preference for oral or interactive presentation (preferred session assignment)

The full text of accepted papers will be published in the conference proceedings. This text is due in electronic form by May 7, 2011. Please direct all submission inquiries to Diana Gonzalez at 703/642-9020, NIP_DF@imag.org