CALL FOR PAPERS

PRINTING FOR FABRICATION & ICAI
INTERNATIONAL CONFERENCE ON ADVANCED IMAGING 2020

CHIBA, JAPAN
NOVEMBER 2-6
colocated with
IS&T’s 28th Color and Imaging Conference: CIC28

JIST-first Deadline: 19 April 2020
Paper Abstract Deadline: 1 May 2020
Accepted Papers Manuscript Deadline: 1 September 2020

Sponsored by IS&T and the Japanese Federation of Imaging Societies (FIS):
Imaging Society of Japan (JSJ) • Society of Photography & Imaging of Japan (SPIJ) • Institute of Image Electronics Engineers of Japan (IIEJ) • Japanese Society of Printing Science & Technology (JSPST) • along with Asian Symposium on Printing Technology (ASPI), Vision Society of Japan (VSJ), and Int’l Tech. Exhibition on Image Tech. and Equipment (ITE)
A WORD FROM THE CHAIRS

Join World Innovators to Shape the Imaging Eco-System and Generate New Value

The human intellect has been attracted to printing from the moment Gutenberg revealed his invention, which preceded the industrial revolution. Since that time, printing has been continuously expanding into new areas, with digital printing technologies not only marking on media, but moving into the 3D, and even 4D, domains. This is the imaging eco-system, a collective term that melds all the aspects—digitization, materials, processes, output—of digital printing that allow us to bring an idea, image, or object to fruition. As one of mankind’s most important means of expression, imaging must be continuously advanced, researched, and developed. While different imaging cultures are found in different geographic regions of the world, we have reached a time when a global-scale Imaging Eco-System is ready to be built and our hope is this collocated event will lead the way. The last time this conference was held in Japan was in Yokohama in 1993, when the challenges were getting printing into the office and home. Twenty-seven years later, our challenge is to bring new imaging domains to new and existing industries, as well as individuals.

Please join American, European, and Asian imaging innovators in Chiba, Japan, where the imaging revolution—from material interactions to 3D advancements and applications—will be showcased. Recent progress in mature and leading-edge imaging technologies will be presented by experts from around the world, complemented by a short course program and many networking opportunities. IS&T’s Printing for Fabrication 2020 in cooperation with the Japan Federation of Imaging Society’s ICAI 2020 is co-located with the 28th Color and Imaging Conference and provides a unique opportunity for practitioners in printing related fields to explore a wide array of insights and knowledge, and to discuss developments across geographies. Join us at the Makuhari Messe in Greater Tokyo and be part of the next wave of innovation! Let’s build the global-scale Imaging Eco-System together!

— General Chair Teruaki Mitsuya and Executive Program Chair Ronald A. Askeland

CONFERENCE COMMITTEES

PRINTING FOR FABRICATION

General Chair
Teruaki Mitsuya, Ricoh Company, Ltd. (Japan)

Executive Program Chair
Ron Askeland, consultant (retired HP Inc.) (US)

Print4Fab/ICAI Joint Program Chair
Nobuyuki Nakayama, Fuji Xerox Co. Ltd. (Japan)

Program Chairs
Yashwanth Kumar Bandari, EVVI (US)
Katrina J. Danovan, South Dakota School of Mines and Technology (US)
Lutz Engisch, Leipzig University of Applied Sciences (Germany)
Masahiko Fujii, Fuji Xerox Co. Ltd. (Japan)
Yasuji Fukase, IS (Japan)
Mariya Gelman, HP Inc. (US)
Susanne Klein, University of West England (UK)
Chungui Kuo, Eastman Kodak Company (US)
Kye-Si Kwon, Soongsil University (South Korea)
Takeshi Menjyo, IS (Japan)
Makoto Omodani, Tohoku University (Japan)
Cristina Rodriguez-Rivero, University of Cambridge (UK)
Alvaro J. Rojas, Univ. Autonoma de Occidente (Columbia)
Dong-Youn Shin, Pukyong National University (South Korea)
Enrico Squade, Zschoriner & Schwarz (Germany)
Atsushi Tomotake, Konica Minaolta Inc. (Japan)
Travis Walker, South Dakota School of Mines and Technology (US)

Short Course Chairs
Neil Chilton, Printed Electronics, Ltd. (UK)
Takeshi Menjyo, IS (Japan)

Community Engagement and Outreach Chairs
Reinhard Baumann, Fraunhofer Institute for Electronic Nano Systems and Technische Universitat Chemnitz (Germany)
Norio Nagayama, Ricoh Company, Ltd. (Japan)
Ingo Reinhard, Xaar plc (Sweden)
Colin Simpson, Dynetics Technical Solutions (US)
Michael Willis, Pivotal Resources, Ltd. (UK)

Late Breaking Technology News Chairs
Masahiko Fujii, Fuji Xerox Co. Ltd. (Japan)
Werner Zapka, WZA Consulting (Sweden)

Steering Committee Chair
Brian Derby, The University of Manchester (UK)

ICAI 2020

General Chair
Teruaki Mitsuya (IS), Ricoh Company, Ltd.

Co-General Chairs
Makoto Omodani (IS), Tohoku University
Yasushi Nakano (IS), Konica Minolta, Inc.
Shigeru Takahara (US), Chiba University

Executive Program Chair
Nobuyuki Nakayama, Fuji Xerox Co. Ltd.

Program Chairs
Kenji Kagishita (IS), Ricoh Company, Ltd.
Naouki Kawana (IS), Canon Inc.
Yoshiaki Konoh (IS), Konica Minolta, Inc.
Hiroyuki Ino (SPE), Tokyo Institute of Technology
Kenichi Kuge (SPE), Chiba University
Junichi Kanna (SPE), Tokyo Institute of Technology
Haruo Uyama (USPST), Tokyo Printing Co., Ltd.
Toshifumi Ino (USPST), FujiFilm Corporation
Toshifumi Sato (USPST), Tokyo Polytechnic University
PRINT4FAB AND ICAI CONFERENCE TOPICS

PRINTING FOR FABRICATION
- Recent advances in the fundamental science and technology of the Imaging Eco-System
- Printing materials and material interactions
- 3D printing
- Digital printing for packaging
- Printed functionalities
- Printing for textiles and nonwovens
- Printing onto non-flat objects
- Printing of biological materials, pharmaceuticals, healthcare devices, and wearables
- Printing for security applications

PRINTING TECHNOLOGY AND INNOVATION
- Printing processes
- Prepress and post-press
- Patterning applied technology
- Electronic display application technology
- Image signal technology
- Basic / New technology / New field
- Education / History and culture

IMAGE CAPTURE AND UTILIZATION
- Image input & output technology
- Scientific use of imaging & photographic technologies
- Functional material & system for light and image
- Image processing & evaluation
- Expression and technology of photography
- Image preservation, archives, history
- Environment and energy-saving, and related peripheral technologies
- Nuclear emulsion plate and applications

THE VENUE: CHIBA, JAPAN (30 MINUTES FROM TOKYO)

Print4Fab2020 takes place in the International Hall of the Makuhari Messe in Chiba, Japan—a one hour train ride from Narita International Airport (NRT) and a 30-minute ride from downtown Tokyo. Set on the northeast side of Tokyo Bay, on a clear night you can watch the sun set behind Mount Fuji. Chiba Prefecture combines modern large-scale shopping malls and conference facilities with historic streets, traditional markets and fishing towns, deep green woodlands, and a majestic coastline. Lodging options are within walking distance of Makuhari Messe. Details will be posted on the conference webpage. NRT is the primary international airport serving Tokyo/Chiba area. Public transport (buses and trains) leaves directly from the airport to Chiba and costs around US$10; taxis are around US$130-150.

COOPERATING ORGANIZATIONS
INVITATION TO SUBMIT YOUR WORK
Authors wishing to present their work at Printing for Fabrication/ICAII 2020 are invited to submit their work via the conference submission site. Within the site, authors select a preferred track/session from the topics list and a preferred presentation modality (oral or poster). Final decisions about track/session and modality resides with the Executive Program Chairs.

SUBMISSION OPTIONS
If you want your paper to appear in the Printing for Fabrication proceedings and IS&T Digital Library, you must select the JIST-first or Peer-reviewed proceedings paper option.

JIST-FIRST: Submit a journal-length paper to the Journal of Imaging Science and Technology for full peer review. Accepted papers appear as Open Access in the JIST Digital Library and authors are given an oral speaking slot. Authors must register for the conference and present their work; unpresented work is pulled from the digital library. (Open to Print4Fab or ICAI authors.)

PRINT4FAB PEER-REVIEWED PROCEEDINGS PAPER: Submit a 4-6 page paper for full peer review. If accepted, revised papers that take into consideration reviewer comments are due 1 September. Authors of peer-reviewed papers are given higher consideration for an oral talk. Authors must register for the conference and present their work; unpresented work is pulled from the digital library.

ICAI PAPER (for inclusion in ICAI proceedings): Submit a 1-2 page extended abstract for acceptance review. Upon acceptance, authors will prepare a camera-ready 4-page paper to be published in the ICAI proceedings. Authors must register for the conference prior to the early registration deadline (non-refundable) and present their work.

PRINT4FAB PRESENTATION-ONLY: Submit a 1-2 page extended abstract; if accepted, authors may revise their abstract by 1 September for inclusion in the conference program book. Authors must register for the conference prior to the early registration deadline (non-refundable) and present their work.

KEYNOTE PRESENTATIONS
Keynote presentations given by leaders in the industry and related scientific fields are a highlight of the conference. These talks provide attendees with broader context on industry-wide issues, important technical achievements, and/or international market trends.

Confirmed Keynotes (as of 19 February 2020)
- Prof. Yury Gogotsi, Drexel University (US): MXenes: Printed Functionality and Material Science (working title)
- Dr. Jay Gondek, HP Vancouver (US): Joint Print4Fab/CIC Keynote: A History of Color, Inkjet, and 3D Printing (working title)
- Prof. Aran Hansuebsai, Chulalongkorn Univ. (Thailand): Title TBA
- Prof. Kye-Si Kwon, Soonchunhyang University (South Korea): Inkjet-based Directprinting Methods for Non-flat Surfaces (working title)

SHORT COURSES
The conference offers an extensive array of 2- to 4-hour short courses and workshops taught by world-renowned experts on a wide range of subjects related to digital printing technologies. Course details will be released by the end of April.

Courses are taught in English, but someone who speaks English and Japanese will be present to help with questions/clarification. Course notes will be provided in English and Japanese as possible.

Past classes have included: Role of Inkjet in Commercial and Industrial Printing Applications; Digital Textile Printing: Applications, Markets, and Technology; Industrial Inkjet: Applications,
HOW TO SUBMIT
Prospective authors are encouraged to review all the details on the conference website. Submissions are processed on a rolling basis.

JOURNAL OF IMAGING SCIENCE & TECHNOLOGY: JIST-FIRST
submit via jist.msubmit.net DEADLINE: 19 April 2020
Submit a complete JIST manuscript of original work; under “Manuscript Type/Focused Sections” select JIST-first—Printing for Fabrication/ICAI 2020. Before submitting, please review the Author Guidelines at www.imaging.org/JIST. Authors will be notified by mid June as to their status. Accepted papers are included in the conference proceedings as a JIST reprint; the citation resides with the journal. Upon acceptance, at least one author must register for the conference at the full registration fee and pay JIST page charges reduced by 50%. Rejected papers may be converted to a Proceedings Paper by the author. Direct submission inquiries to Katrina Bird at jist@imaging.org.

PRINT4FAB PEER-REVIEWED PROCEEDING PAPER, ICAI PAPER, OR PRESENTATION-ONLY
submit via www.OpenConf.org/Print4Fab_ICAI_2020 DEADLINE: 1 May 2020
Submissions should be based on the templates provided. Proceedings papers for peer review should be 4-6 pages. ICAI papers or Print4Fab presentation-only talks should be a 1-2 page extended abstract that clearly states the technical content, methods, and conclusions of the work; if appropriate, emphasize what is new compared to previously presented/published results. All authors will be asked to indicate their preference for an oral or poster presentation. Submissions are reviewed on a rolling basis; authors will be notified beginning in mid-June as to their acceptance. Final papers/extended abstracts are due in electronic format by 1 September 2020 for inclusion in the conference proceeding materials. Direct submission inquiries to Katrina Bird at papers@imaging.org.

OPPORTUNITIES

Challenges, and Considerations; and Adapting Functional Materials for Ink Jet Deposition.

DEMONSTRATION SESSION
Authors and attendees have the opportunity to showcase work related to the conference such as products, prints, software programs/interfaces, and hardware during one of the conference breaks. Those interested in participating should contact Donna Smith (dsmith@imaging.org).

STUDENT/YP EVENT
Tuesday evening students and young professionals will get together for a fun activity that highlights Japanese culture. Past outings have included bowling, pool, vintage video arcade games, darts, and pub crawls. Join colleagues for an evening of fun. It’s a great way to get to know others at the conference.

LATE BREAKING NEWS
A favorite of attendees, this session held at the end of the week compiles recent success stories on the implementation of digital printing applications into manufacturing lines. We encourage you to present your success story by contacting print4fab@imaging.org.

EXHIBITION
The exhibit features industry-leading companies and their state-of-the-art products and applications, including materials, inks toners, papers, films, textiles, and test equipment. The exhibit runs 4-6 November. Early exhibitor registration rates are in effect until 30 June 2020. For information, contact Donna Smith (dsmith@imaging.org).