

MONDAY			
<i>*Note: Refer to Printed Program Book for any discrepancies in schedule and paper abstracts</i>			
9:00	Keynote: Conquering the Challenges of New Inkjet Markets with MEMS Printhead Technology, Martin Schoeppler, FUJIFILM Dimatix, Inc.		
10:10	TRACK 1	TRACK 2	TRACK 3
	Textile and Nonwovens Printing	Materials and Material Interactions	Fundamental Science and Technology of Inkjet I
	FOCAL: Dye Sublimation Printing with Thermal Inkjet	FOCAL: How Carbon's Digital Light Synthesis is Enabling Digital Manufacturing of Polymeric Products	FOCAL: Ink Jet—The Pioneers of the 19th and 20th Centuries
10:40	40-minute Coffee Break		
11:20	DTG Printers Improve Textile Quality with Innovative Pre-treatment Agent	The Effect of Different Relative Humidity and Temperatures of Coated Paperboards on Inkjet Print Quality	Analysis Technology of Residual Solvent of Printed Inkjet Ink with Near-Infrared Spectroscopy
11:40	Optimization of Pre-Treatment Solution by Adjusting Thickener's Property to Fine-tune Coloring Characteristics on Fabric	Thermal Effects of Contact Angle in Polymeric Powder for 3D Printing	Study on Ink-Jetted Droplet Volume Measurement Using Surface Energy Patterned Channels
12:00	Investigation of Reactive Dye Based Ink Fixation Behavior in Digital Printing on Cotton Fabric	Development of Safety and Low Energy Curable Monomer	Mottle Evaluation of Coated Cardboards Printed in Inkjet
12:20	FOCAL: Effect of Fabric Hairiness and Pretreatment on Quality of Digital DTG (Direct to Garment) Printing	The Optical Properties of the Woodburytype - An Alternative Printing Technique Based on a Gelatine/Pigment Matrix	Quantification of Evaporation, Penetration and Viscosity Increasing Behaviors of Ink Droplets after Landing on Media
12:40		<Interactive Previews> — Engineering Ag Particle Based Inks to Improve Electrical and Sensing Properties of Conductive Composites Will stand by poster Tuesday AM Coffee break — Synthesis of Carbon Dots Ink by Cellulose Nanofiber via Microwave Method	<Interactive Previews> !2:40 – 12:55 — Fiber Morphology Analysis for Directed-Energy Deposition Manufacturing Process — Effect of Ink, Substrate, and Target Line Width on the Line Quality Printed Using Dimatix DMP Inkjet — Lifetime Improvement of Sol-gel PZT Thin Film Actuators: from Methodology to Reality (5601 Print Head) — CANCELLED: Inkjet Printing for Bio-sensor Applications Session ends at 12:55
12:50	80-minute Lunch Break		
14:10	KEYNOTE: Printed Textiles On Demand: Technology Challenges Meet Creative Opportunity, Kerry Maguire King, Spoonflower Inc.		
15:10	JIST-first Replication of Screen-Printing Fabric via Ink-jet Textile Printing	Printing Biological Materials	15:15 – 15:45 FOCAL: Stable Inkjet Printed Lines at Ultra High Resolution
		Printable Glycosaminoglycan Graded Gelatin Methacryloyl Acetyl Hydrogels	
15:30	Mastering Ink Droplet Absorption on Textiles Using Primer + <Interactive Previews> 15:50 – 16:00 — Development of New Inkjet Ink for Leathers — Development and Evaluation of Digital Denim Technology session end at 16:00	SynJet: A Novel Chemical Dispensing Platform for High-throughput Reaction Screening and Optimization	
15:50	30-minute Coffee Break		
16:20	3D Printing I	Printed Functionalities	FOCAL: Fundamentals of Thermal Inkjet Technology Micropumping and its Application for Printing and Life Science
	FOCAL: 3D Printed Electronics with Multi Jet Fusion	Starts at 16:35 Temperature Control for Direct Thermal, Three Color, Single-Pass Imaging	
16:50	Application Kaizen for FDM 3D High Temp (500°C) Hotend	How to Print a Rainbow	Surface Tension Driven Meniscus Oscillations and the Effects on Droplet Formation
17:10	Robotic Ceramic Paste Extrusion for Industrial Prototyping and Production	Inkjet Printing of 3D Optics for Individualized Illumination Systems	Jetting Very High Viscosities with Piezo-Electric Drop-on-Demand Printheads for Increased Capability of Photopolymer 3D Printing
17:30	Colleague Connections: The Future of Digital Textile Manufacturing	Colleague Connections: Advances in 3D Printing Technologies	Inkjet Waveform Optimization and Print Quality Analysis
17:55			What It Takes to Integrate/Build an Inkjet System and the Approach to Successful Implementation
DAY ENDS AT 18:30		DAY ENDS AT 18:30	
DAY ENDS AT 18:30		DAY ENDS AT 18:15	
Student/Young Professionals Get Together 19:00 – 22:30			

TUESDAY			
<i>*Note: Refer to Printed Program Book for any discrepancies in schedule and paper abstracts</i>			
9:00	KEYNOTE: Application of Printed, Stretchable Electronics for Monitoring Brain Activities, Tsuyoshi Sekitani, Osaka University		
	TRACK 1	TRACK 2	TRACK 3
	3D Printing II	Printed Electronics	Fundamental Science and Technology of Inkjet II
10:10	FOCAL: Large Scale Metal Additive Manufacturing — System Configuration, Materials, and Challenges	FOCAL: Printed Electronics Integrated with Carbon Fiber Composites	FOCAL: Simulation, Visualization, and Analysis of Drop Breakup and Coalescence in Ink Jet Printing and Drop Based Fabrication
10:40 40-minute Coffee Break / Exhibits Open			
11:20	Calibration, Printing, and Post-machining Issues for Large-scale Metal Additive Manufacturing Components	Micro-reactive Inkjet Printing of Conductive PEDOT:PSS Hydrogels	Shear-mode Piezo Inkjet Head with Two Recirculating Paths
11:40	Fabrication of Large-scale Ti-6Al-4V Structures using 3D Printing: Sensing, Control, and Automation	Sustainable Substrate for Printed Electronics	Healthcare Applications
			Detection, Imaging, and Quantification of DNA-based Pathogen based on Inkjet-Printed Test Strips
12:00	Design and Digital Fabrication of Magneto-dielectric Composites for Additive Manufacturing of Gradient Index RF Lenses	Printable 2D Conductors for Wearable Electronics Applications	12:00 – 12:30 FOCAL: Paper-based Electrochemical Sensors: How to Converge Sustainable Electrochemical Sensors with Printing Techniques + 5 MIN CHANGE SESSIONS
12:20	3D printing of ethylcellulose implants by solvent jetting	Image Based Quality Assurance of Fabricated Nitrate Sensor	
12:40	<Interactive Previews> 12:40 – 13:00 — 3D Printing for Glass Casting — Printing the Muses: Reimaging Digital Musical Instruments through 2.5D Printing — Additive Manufacturing with Soft TPU: Thermal Properties for Printability and Adhesion Strength in Multimaterial Flexible Joints — Surface Color Optimization of Powder-based 3D Objects based on Impregnation Process	<Interactive Previews> 12:40 – 12:50 — Effect of Introducing Receptive Layer to Paper Substrate in Powder Electroluminescent Device — Study on Preparation of Organometal Halide Perovskite and Electron-transporting Layer Thin Film by Ink-jet Printing	Digital Packaging
			Methods of Tracking Unique Items through High-Volume Print & Fabrication Operations
13:00 60-minute Lunch Break			
14:00	FOCAL: Application of Attribute Information of Voxel-Based 3D Data Format FAV for Metamaterials Structure Design	FOCAL: Image-based Non-contact Conductivity Prediction for Inkjet Printed Electrodes	FOCAL: Smart Packaging—How Smart are the Applications
14:30	Barcodes on Non-Flat Surfaces	The Development & Fabrication of the All Inkjet Printed Electronic Devices Using Novel Functional Materials Suitable for Various Sensing Applications in the Field of Printed and Flexible Electronic	How the Printing Industry will Enable More Environmentally Friendly Packaging
14:50	Multi Material Wire-arc Deposition using Metal Big Area Additive Manufacturing	Double Sided Electrodes Connection Based on Printing Method	Methods for Optimising Ink and Coatings for Packaging
15:10 40-minute Coffee Break/Exhibits Open			
15:50	Data Analysis Approach for Additive Manufacturing Print Quality	Influence of Printing Parameters on Multiwall Carbon Nanotube (MWCNT) Sensors Fabrication and Performance	LATE BREAKING NEWS
16:10	Printed Smart Objects	Security Printing	
		3D Printing Technique that can Record Information Inside an Object as Rewritable	
16:30	JIST-first The Effect of Sub-surface Structure on the Color Appearance of 3D Printed Objects	Advances in the Decoding of Data-Bearing Halftone Images	
16:50	Visualization of Biomedical Products based on Paper-based Color 3D printing	<Interactive Preview> 16:50 – 16:55 — Lightfastness of Invisible UV Fluorescence Inkjet Printing on Anticounterfeit Document	
DAY ENDS at 17:10		DAY ENDS at 16:55	DAY ENDS at 17:15
CONFERENCE RECEPTION 17:30 – 19:00 Cityscape Bar and Lounge Tower 1, 46th Floor, Hilton San Francisco Union Square			

WEDNESDAY		
<i>*Note: Refer to Printed Program Book for any discrepancies in schedule and paper abstracts</i>		
9:00	Fabricating Beauty: The Art and Science of Graphical 3D Printing , <i>Philipp Urban, Fraunhofer Institute for Computer Graphics Research IGD</i>	
	FRONTIERS IN IMAGING: DIGITAL PRINTING FOR FABRICATION	Patentable Abstract Ideas: Talk and Discussion
10:10	WELCOME AND INTRODUCTION	
10:15	3D Printed Custom Footwear for Sports and Leisure, <i>Amit Marathe, HP Inc.</i>	New Guidelines Issued by the U.S. Patent & Trademark Office on Patenting Computer-Implemented Inventions That Broaden Patent Eligibility By Restricting Abstract Idea Determinations FOLLOWED BY OPEN DISCUSSION ON LEGAL ISSUES
10:45	Printed and Hybrid Integrated Wearables for Health Monitoring, <i>Liisa Hakola, VTT Technical Research Centre of Finland</i>	
11:15	30-minute Coffee Break / Exhibits Open	
11:45	Interactive 3D-Printed Models for Students with Visual Impairments, <i>Shiri Azenkot, Cornell University</i>	JOINT PRINT4FAB / TDPF SESSION: Quality and Longevity Testing for Photographic Output
		Subjective Image Quality Assessment Digitally Printed Images
12:15	Advanced Printed Electronics Technologies for Flexible IoT Devices, <i>Toshihide Kamata, National Institute of Advanced Industrial Science and Technology (AIST)</i>	12:05 Image Permanence of Photographic Prints under LED Lighting
		12:25 Endpoint Criteria for Evaluation of Image Permanence of Photographic Prints
12:45	The Expanding World of Electrophoretic Displays, <i>Michael D. McCreary, E Ink Corporation</i>	FREE
13:15	1-hour 45 minute group lunch with coffee/exhibit/ demo/posters	
15:00	Autonomous Printing: The Next Evolution, <i>Chunghui Kuo, Eastman Kodak Company</i>	International Symposium on Technologies for digital Photo Fulfillment (TDPF) 2019: Materials and Technologies Enabling Quality Photo Products
		How AI is Actually Supporting the Photo Products Ordering
15:30	IoT's: The Emerging Cybersecurity Challenge, <i>Lindsey Hearst, HP Inc.</i>	The Importance of Dark Keeping Factors in Determining Overall Image Permanence of Photographs—2019 Update with Pigment Inkjet
16:00	15-minute Coffee Break	Recent History of Kodak EKATCOLOR Papers – Enabling the Photo Fulfillment Industry
16:15	Digital Light Synthesis™ and the Manufacture of Medical Technologies, <i>Steven K. Pollack, Carbon Inc.</i>	16:30 15-minute Coffee Break
16:45	3D Bio Printing of Human Lung Scaffolds, <i>Pedro Mendoza Bru, 3D Systems Corporation</i>	TDPF Group Discussion: Stimulation of Printing via Instant Print Technologies
17:15	Closing Remarks	
END OF DAY 17:30		