

**19th Annual
THERMAL PRINTING CONFERENCE**

Connecting with New Technologies, Applications & End User Trends

May 19-21, 2008

Arizona Golf Resort Hotel & Conference Center
Mesa, Arizona

This year's conference departs from the traditional agenda by including a number of speakers from emerging technologies and capabilities that impact future thermal printing usage trends. Topics include

- Camera phones and PDA's as application platforms and bar code readers
- Wireless communications trends that will advance mobile printing
- RFID chips and fabrications for smart labels
- Item level RFID tracking and printable electronics
- New added value thermal media trends in color, photos and security
- Application trends that impact ID cards and document security
- Impact of new capabilities in ink jet and electrophotography

As a mature technology, thermal printheads and media are highly refined, distribution channels are well established and thermal printing continues to dominate its primary markets. Given its maturity where can the thermal industry derive new and continued growth? This year's conference is designed to provide in depth insight to this and other strategic questions by exploring the new capabilities and innovations listed above.

IMI's **19th Annual Thermal Printing Conference** novel format is designed to gain insights into the opportunities and challenges of exploiting world markets and capitalizing on the many new and exciting information, communications and media related innovations. Historically these trends have impacted thermal printing more than progress in competing technologies such as ink jet. Come and explore ways in which camera phones, mobile computing and wireless advancements can mold the future usage of the unique and resilient technology known as thermal printing.

IMI's **19th Annual Thermal Printing Conference** program combines a diverse group of speakers that includes new, innovative information and communication products, consumer, business and industrial end-user trends and thermal industry experts. The format is designed to connect industry participants with systems and end-user product innovations and prepare thermal printing industry participants for future challenges and opportunities. It is also an ideal training format for new personnel.

Conference Chairman

Harold Schofield, Schofield Imaging Associates

Conference Speakers

Hidekazu (Henry) Akamatsu, Kyocera

Elaine A. Bresnick, Consultant

Russ Corace, Printek

Dale Easter, Intel

Don Franz, Photofinishing News

Ikuo Fujita, Mitsubishi Paper Mills

Dr. Daniel J. Harrison, IIMAK

Dr. Nils Miller, Hewlett Packard

Frank Neffinger, Kanzaki Specialty Papers

Jiro Oi, HIT Devices

Dr. John Stanton, TTP

Endre D. Vargha, O'Neil Product Development, Inc.

Dr. James Williams, Polyonics

Tadashi Yamamoto, Rohm



19th Annual Thermal Printing Conference

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Mesa, Arizona

Monday, May 19, 2008

11:00 a.m. Conference Registration

1:30 p.m. Opening Session
Global Thermal Printing Industry

Welcome & Introductions

Alvin G. Keene, President, Information Management Institute, Inc., Carrabassett Valley, Maine

Harold Schofield, Schofield Imaging Associates, Narragansett, Rhode Island

CONFERENCE & INDUSTRY OVERVIEW

Harold Schofield, Schofield Imaging Associates, Narragansett, Rhode Island

- Conference Overview & Highlights
- New Worldwide Thermal Printing Survey Results
 - Thermal Markets Update & Forecast
 - Enabling Technologies & Competitive Threats
 - New Applications
- Future Perspectives

NEW FRONTIERS IN THERMAL IMAGING

Dr. Daniel J. Harrison, Vice President, Technical Operations & Group Manager, IIMAK Fluid Inks, International Imaging Materials, Inc. Amherst, New York

- Printed Electronics
 - Printing Conductive Traces without Sintering
 - Conductive Thermal Transfer Ribbons for Chipless RFID
- Security Printing
 - Invisible Code Printing
 - DNA Markers in Thermal Transfer Ribbon
 - Covert Thermal Transfer Ribbon Taggant Systems
- Digital Glass Decoration: DecoTherm Chemistry & Applications
- Direct Thermal
 - < 2 mil Films
 - PLA Substrates for Biodegradability
 - TOF – Super Premium Direct Thermal

PRINT WITH THE ENVIRONMENT IN MIND: LATEX PRINTING TECHNOLOGIES

Dr. Nils Miller, Ink/Media and Environmental Strategy Senior Scientist, Hewlett Packard

- Latex Inks & Thermal Inkjet Technology Enable New Industrial Inkjet Platform
- Environmentally-Friendly, Water-based Inks for Commercial & Industrial Applications
- Surface Treatment Technology for HP Latex Inks & Low-Solvent Inks on HDPE Media
- Outdoor Print Durability & Permanence without Environmental, Health & Safety Considerations of Organic Solvents

DYE SUBLIMATION DEVELOPMENTS IN PHOTO IMAGING INDUSTRY

Don Franz, President, Photofinishing News International Consulting Group, Bonita Springs, Florida

- Expected Expansion of Thermal, Ink Jet & Electrophotographic Photo Printing
- Factors Influencing Developments
 - Camera Phones
 - Web & Electronic Sharing
- Global Level View based on Detailed Analysis of Developments by World Regions
- Photo Industry Trends & Developments

5:30 p.m. Reception

For Latest Program Updates

&

To Register Online

Visit IMI Web Site

www.imiconf.com

Tuesday, May 20, 2008

7:30 a.m. Continental Breakfast

8:30 a.m. Session 2
Market Expansion in Wireless Technologies, Mobile Printers & Kiosks

TECHNOLOGY EVOLUTIONS & THE IMPACT ON PRINTING

Dale Easter, Business Manager-Print Imaging, Embedded & Communications Group, Intel Corporation, Chandler, Arizona

- Accelerating New Technologies Rate over next 5 years Leading to Creation of Opportunities for Print Industry
- Intel's Historical Leadership Role in Enabling Key Technologies & Driving Industry Standards to Expand & Accelerate Growth of Market Segments
- Wireless, Security & Storage Technologies have Widespread Acceptance & are Poised to Extend Penetration in Print Hardware thru New & Innovative Usage Models
- Lower Power & Energy Conservation plus a Plethora of Emerging Mobile Products are Poised to Rapidly drive Product Design Cycles towards a Diverse Range of Print Solutions
- User Interfaces undergoing Dramatic Changes with Increased Display Complexity, Haptic Interfaces & Voice Command/Control in an Array of Embedded Devices

THERMAL PRINTING IN KIOSK APPLICATIONS

Elaine A. Bresnick, Consultant, Newton, Massachusetts

- Introduction & Kiosk Definition
- Kiosk Marketplace
- Market Analysis & Growth Trends
- Kiosk Applications by Vertical
- Self-Serve Printers: Features, Functions & Benefits
- Market Price Expectations
- Opportunities for Self-Serve Printing
- How are Kiosk Printers Sold?

WIRELESS COMMUNICATION TRENDS & MOBILE PRINTING

Russ Corace, Executive Vice President, Printek Inc., Benton Harbor, Michigan

- What are the Functional & Business Drivers for these Trends?
- What are the Enabling Technologies & Why Now?
- The ROI of Wireless Mobile Printing
- How to Select & Implement the Right Configuration

WHAT'S NEW IN PORTABLE THERMAL PRINTING

Endre D. Vargha, VP Engineering & General Manager, O'Neil Product Development, Inc., Irvine, California

- Market Overview
- Market Drivers
- Key Characteristics of Portable Printers
- Wireless Security for Portable Printers
- Emerging Applications
- Future Trends

12:00 Noon Luncheon

1:30 p.m. Session 3
Media & Printhead Advancements Enable Next Generation of Printers

DIRECT THERMAL MEDIA

Frank Neffinger, Director of Sales, Kanzaki Specialty Papers, Ware, Massachusetts

- Market Overview
- Changing Markets of Direct Thermal
- Changing Direct Thermal Technology
- Emerging Markets

THERMAL PRINTHEADS – MAXIMUM PERFORMANCE

Hidekazu (Henry) Akamatsu, Manager of Application Engineering, Thermal Printhead Division, Kyocera Corporation, Kagoshima, Japan

- Black & White Applications
- Color Applications
- Trends For Future

PRINthead PROPOSAL FOR NEW GENERATION OF THERMAL PRINTER

Tadashi Yamamoto, Senior Design Engineer, Printhead Section, Rohm Electronics USA, LLC, San Diego, California

- Monochrome Graphic at High Speed
- High Speed Label Printer
- Card Printer
- Rewritable Printer

Suppliers' Forum

The **Suppliers' Forum**, a popular component of IMI conferences, features five minute presentations related to technology, capabilities, services, new product introductions, etc. The **Suppliers' Forum** is open to all conference registrants.

5:30 p.m. Reception

Wednesday, May 21, 2008

7:30 a.m. Continental Breakfast

8:30 a.m. Session 4
Technology Innovations Foster Markets & Applications

INNOVATIVE APPLICATIONS OF THERMAL TECHNOLOGY

Dr. John Stanton, The Technology Partnership, Royston, Hertfordshire, UK

- Experiences in Thermal Transfer & Direct Thermal Printer Developments
- Case Studies of Thermal Transfer & Direct Thermal Printer Developments along with some of the Lessons Learned
- A New Thermal Printer Product
- Development of a Novel Direct Thermal Printer Aimed at Industrial, Toy & Graphic Art Applications

HARSH ENVIRONMENT LABELING

Dr. James Williams, Founder & Chairman, Polyonics Inc., Westmoreland NH

- Mundane Applications but Important, High-Value Added Markets
- The Label is Critical Component in Manufacturing Process & Thermal Transfer is an Integral Part
- New Electronics Industry Requirements (ROHS, WEEE & "Green" Movement) Providing New Opportunities
- Flexibility of Thermal Transfer Printing Processes in Industrial Environments
- Cost Benefit & ROI for On-Demand Vs. Conventional Presses
- Case Studies: PCB's, Extreme High Temperature Steel, etc.

THERMAL REWRITABLE MATERIAL - THERMOREWRITE

Ikuo Fujita, Group Leader, Specialty Materials Development Division/ Rewritable Media Group, Mitsubishi Paper Mills, Ltd. Tokyo, Japan

- Thermal Rewritable Material – Types & Differences
- Key Chemicals & Mechanism
- Printing & Erasing Property
- Product Line-Up
- Application & Market Information
- New Developments in ThermoRewrite

THERMAL REWRITABLE TECHNOLOGY

Jiro Oi, Director, HIT Devices, US Office, Brentwood, Tennessee

- Major Components
- Erasing Methods
- Limitations & Benefits
- Challenges & Solutions
- Symbiotic Relationship with RFID
- Current & Future Markets

12:00 Noon Adjournment

Benefits Of Conference Attendance

- Participate in the only 2008 program dedicated entirely to the Thermal Printing Industry
- Learn thermal printing technology developments and innovations to enhance printer applications and performance
- Obtain information on the current growth markets and applications that offer attractive opportunities
- Learn subsystem component options and design tools to enable the most cost effective printer designs
- Establish personal contacts with leading experts in thermal printing to evaluate factors essential to the continued advancement and market expansion of thermal printing
- Gain knowledge to aid your company's strategic planning relative to thermal printing development, marketing and implementation
- Have a complimentary display space to inform the industry of your products and services
- Give a five minute presentation during the popular Suppliers' Forum session.



2nd RFID Technology Integration Symposium

May 21-22, 2008

Arizona Golf Resort Hotel & Conference Center
Mesa, Arizona

Wednesday, May 21, 2008

12:00 Noon Symposium Registration

2:00 p.m. **Evolution of RFID Integration**

WELCOME AND INTRODUCTIONS

Alvin G. Keene, President, Information Management Institute, Inc., Carrabassett Valley, Maine

RFID: WHAT, WHERE AND HOW?

Gary Randall, American Barcode and RFID, Phoenix, Arizona

- RFID Is Changing & Will Continue To Change Supply Chain Operations
- RFID Drivers: Compliance Programs, Improved Systems Results, Cost Efficiencies & Other Benefits
- Relevant Standards & Specifications
- Typical Components & Integration Requirements For RFID Systems
- Future Trends

RFID IMPLEMENTATION FOR "ONE-OF-A-KIND" PROJECTS IN EXTREME ENVIRONMENTS

Mike Beigel, President, Beigel Technology Corporation, Encinitas, California

- Fresh Perspective on RFID Implementation
- Opening up New Areas of Technology with "One-of-a-Kind Projects"
- Examples & Lesson Learned
- New RFID Analysis & Development Tool with a New Value Proposition/ROI

RFID e-VALUATION FRAMEWORK TO IDENTIFY THE VALUE PROPOSITION FOR RFID

Professor Frederick J. Riggins, Carlson School of Management, University of Minnesota, Minneapolis, Minnesota

- Challenges in Developing RFID Business Case Framework
- Basic Framework Concepts
 - Firms can Apply RFID along Five Dimensions of Commerce
 - New RFID Investments Typically Justified by Generating Efficiency, Effectiveness and/or Strategic Benefits
 - RFID can be Applied to 4 Structural Settings across the Value Chain
- RFID e-Valuation Grid & Its Application to see where RFID can Generate Value
- Case Examples

Suppliers' Forum

The Suppliers' Forum, a popular component of IMI programs, features 5-minute presentations related to technology, capabilities, services, new product introductions, etc. The Suppliers' Forum is open to all symposium registrants.

5:00 p.m. Reception

Thursday, May 22, 2008

8:30 a.m. **RFID Integration Options**

SUCCESSFUL IMPLEMENTATION OF REAL WORLD PROJECTS

Victor Vega, Tag Product Marketing, Alien Technology Corporation, Morgan Hill, California

- Common Implementation Issues
- Evolution of RFID Drivers from Mandates to ROI
- Education Essential for Successful Implementation
- Application Examples: Supply Chain, Brand Authentication, Asset Tracking & Emerging Applications
- What can we Expect in the Future?

RFID WITH THERMAL REWRITABLE PRINTING

Ikuo Fujita, Group Leader, Specialty Materials Development Division/Rewritable Media Group, Mitsubishi Paper Mills, Ltd. Tokyo, Japan

- Introduction of Thermal Rewritable Material – ThermoRewrite
- Principle of ThermoRewrite
- Reprintable RFID with ThermoRewrite: Benefits, Applications & New Developments

THERMAL REWRITABLE TECHNOLOGY & RFID

Jiro Oi, Director, HIT Devices, US Office, Brentwood, Tennessee

- Common Enemy for RFID & Rewritable – Media Cost
- Symbiotic Relationship
- "Mieruka" - Visualization
- Our Involvement – Erase Head
- Example of How it is Used

OPEN DISCUSSION WITH THE SPEAKERS

- Questions (Yes) and Answers (Maybe)
- Everything You Want To Know But Were Afraid To Ask About RFID

12:00 Noon Luncheon

1:00 p.m. **Resource Session**

APPLICATION-SPECIFIC RFID TAGS: WHY, WHERE & HOW

Webinar Presented by RFID Product News
Robert Ryckman, Vice President Sales & Marketing, CCL Label Inc.

Kenneth Ratton, Vice President Sales & Marketing, Radiant RFID

Robert Oberle, Chief Technology Officer, RCD Technology

- Customizing Inlays
- Case Study: Evacuee Wristbands
- Development of an Application Specific Tag

OPTIMIZING ITEM-LEVEL TRACK & TRACE SOLUTIONS WITH APPLICATION SPECIFIC RFID TAGS

Webinar Presented by RFID Product News
Robert Oberle, Chief Technology Officer, RCD Technology

Mike Ruiz, Chief Information Officer, Innovative Control Systems

- Purpose Designed & Built RFID Tag
- Specification & Testing
- Application Space
- Design, Results & Validation
- Unique RFID Application for Car Wash Industry

Other Webinars and Background Document Presentations will be available during this session.

A final schedule will be posted online.

4:00 p.m. Adjournment

Symposium Leaders

Mike Beigel, Beigel Technology Corp.

Ikuo Fujita, Mitsubishi Paper Mills

Jiro Oi, HIT Devices

Gary Randall,

American Barcode and RFID

Frederick J. Riggins,

Univ. of Minnesota

Victor Vega, Alien Technology

For Latest Program Updates
&
To Register Online

Visit IMI Web Site
www.imiconf.com

REGISTRATION INFORMATION

Registration Fee: \$1095 per registrant per program
\$995 for each additional registrant from same company to same program
or for same registrant to second program when registered as a group.



The registration fee includes attendance at all sessions and scheduled continental breakfasts, lunches, receptions, coffee breaks plus the conference reference binder and CD.

Cancellations will receive a 100% refund if made 72 hours prior to the start of the program. Substitutions may be made at any time. Cancellations made less than 72 hours prior to the start of the conference will be charged a \$300 cancellation fee but will receive a copy of the complete conference binder and CD.

To register for IMI's **19th Annual Thermal Printing Conference** or **2nd RFID Technology Integration Symposium** the submit the registration form with payment to Susan Meldrum, Conference Administrator, Information Management Institute, Inc., 1106 Valley Crossing, Carrabassett Valley, ME 04947 USA. You may reserve space by calling +1-207-235-2225, sending a fax to +1-207-235-2226 or by sending an email message to imi@imiconf.com or visiting our web site www.imiconf.com

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2nd RFID Technology Integration Symposium

May 21-22 2008

Arizona Golf Resort Hotel & Conference Center - Mesa, Arizona

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All checks must be in U.S. dollars drawn on an U.S. bank and made payable to Information Management Institute, Inc. An invoice with bank transfer details for IMI's U.S. or European bank account will be provided upon request.

Golf & Other Arizona Attractions Available

The Arizona Golf Resort Hotel & Conference Center's 18-hole championship course offers playability and a challenge for players of all levels. Both pre and post conference time, the \$49 (PM) and \$59 (AM) rate provides a shared cart with GPS, mature trees framing each hole, undulating elevated greens, white sand bunkers plus a golf school with PGA instructors, full practice facilities and many other amenities. The signature 14th hole features a 175-yd shot thru Cottonwood trees and over water to the green. Combine golf, Grand Canyon side trip, Sedona, Goldfield Ghost Town, Superstition Mountains, shopping or another Arizona attraction with your conference attendance to make this a truly memorable visit.



Hotel Information

IMI's **19th Annual Thermal Printing Conference** and **2nd RFID Technology Integration Symposium** are being held at the Arizona Golf Resort Hotel & Conference Center in Mesa, Arizona. Hotel reservations are the responsibility of each meeting registrant. To receive the special meeting rate of \$95 (single or double occupancy) for deluxe guest room or \$115 (single or double occupancy) for a one bedroom suite, you must identify yourself as a registrant to an IMI Conference. Early booking is advised as the reduced rate is guaranteed only until April 28, 2008. Each room is furnished with refrigerator, microwave, wet bar, coffeemaker, personal safe and pillowtop mattress.

To make hotel reservations by phone: call Phone +1-800-528-8282 or +1-480-832-3202 and reference the group code "**IMI Conference.**"

Online reservation procedures are posted on IMI's web site www.imiconf.com.

The Arizona Golf Resort Hotel & Conference Center (www.azgolfresort.com) is conveniently located just 30 minutes from Phoenix Sky Harbor International Airport. Situated on their own championship golf course, the resort also features a driving range, chipping and putting greens, proshop, swimming pool and fitness center among other amenities. Conference dress will be casual.

The hotel address is

Arizona Golf Resort Hotel
425 South Power Road
Mesa, AZ 85206-5296 USA
Phone: +1-800-528-8282
Phone: +1-480-832-3202
Fax: +1-480-981-0151

Registration Online Now

www.imiconf.com