IMI

Alchemie

Digital Textile Manufacturing Technologies Conference 2024

June 10-11, 2024
DoubleTree Suites by Hilton Charlotte-SouthPark
Charlotte, North Carolina, USA

CONFERENCE FOCUS

IMI & Alchemie Technology's Digital Textile Manufacturing Technologies Conference 2024 will inform and educate brand owners on the importance of innovative technologies within the dyeing, finishing and printing sectors that can support them to meet their ESG targets and transform the textile industry's sustainability.

Traditional ESG Impacts of the Textile Industry

Currently, the textile industry accounts for 10% of global emissions - greater than international flights and maritime shipping combined. Textile dyeing and finishing processes are some of the most polluting manufacturing processes on the planet, responsible for over 3% of global CO_2 emissions and over 20% of global water pollution. If business as usual persists, by 2050 the textile industry is projected to represent 25% of the global carbon footprint.

Industry Focus is Changing

Many leading brands are answering the call and working to create favorable ESG initiatives and developing more environmentally friendly manufacturing and dyeing processes. Technology and research are playing a key role in making the textile industry more sustainable. The United Nations Framework Convention on Climate Change's (UNFCCC) Fashion Industry Climate Action Charter sets targets to degas supply chains and halve greenhouse gas emissions by 2030 and to achieve net zero emissions by 2050. Using science-based targets (SBT), the initiative outlines a roadmap for reducing emissions in line with the Paris Agreement. The Fashion Charter also sets out targets to ensure that 100% of electricity comes from renewable sources with minimal other environmental or social impacts by 2030, owning and exploiting emissions, and putting more emphasis on brands working with their suppliers to reduce emissions.

CONFERENCE AGENDA & SCHEDULE

MONDAY, JUNE 10, 2024

12:00 pm **Registration**

2:00 pm **Opening Session**

Textile Industry Now & Going Forward

Welcome & introductions
Alvin G. Keene, President, IMI, Carrabassett Valley, Maine, USA
Dr. Alan Hudd, CEO & Founder, Alchemie Technology, Duxford, Cambridgeshire, UK

Digital Technologies Drive Cleantech Textile Manufacturing Technologies
Dr. Alan Hudd, CEO & Founder, Duxford, Cambridgeshire, UK
Protecting the planet is vital, requiring innovation and technology advancement while safeguarding intellectual property. Building business credibility and value is key, drawing lessons from successful inkjet applications. Managing chaos in global growth involves scaling manufacturing effectively.

Driving Sustainability through Standards
Garry Atkinson, Senior Technical Associate, AATCC, Research Triangle Park, North Carolina, USA
Sustainability and circularity are widely discussed subjects, but without meaningful measurements and comparisons, there's a risk of falling into the "greenwashing" trap. Testing and standards are crucial in supporting environmental sustainability and profitability goals. Specific developments in fiber fragment shedding, LED conversion, biodegradation, and more offer valuable insights. Looking ahead, future trends and developments in these areas are anticipated.

National Science Foundation North Carolina Textile Innovation and Sustainability Engine
TBA, Zeis Textiles Extension, Wilson College of Textiles, North Carolina State University, Raleigh, North Carolina, USA

5:30 – 7:30 pm **Networking Reception**

TUESDAY, JUNE 11, 2024

8:30 am **Session 2**
Digital Textile Manufacturing Technologies

New Technologies to Reduce Textile Dyeing & Finishing Global Emissions
Harry Vine, Product Specialist, Alchemie Technology, Duxford, Cambridgeshire, UK
Founded in 2014, Alchemie develops unique digital manufacturing technologies. With patented core technology, it aims to revitalize western textile manufacturing and targets premium markets. It's reshaping textiles into a clean-tech industry, focusing on digital dyeing, printing, and technical textiles for the future.

State of the Industry: Digital Textile Printing
Johnny Shell, Principal Analyst, Textile & Apparel Printing, Keypoint Intelligence, Fairfield, New Jersey, USA

Digital Textile Printing: DTG vs. DTF
Dr. Dan Harrison, Founder, Digital Imaging Materials Consultancy, Pittsford, New York, USA
Direct to garment (DTG) inkjet printing, a successful digital alternative to screen printing, is primarily used on cotton textiles but lacks evolution in printing synthetics like polyester and nylon. Direct to film (DTF) inkjet printing, leveraging image transfer decal tech, offers cost advantages over DTG with no pretreating required. DTF allows for synthetics applications not possible with dye sub technology, providing softer hand feel and superior image quality compared to DTG.

12:00 - 1:30 pm **Networking Lunch**

1:30 pm **Session 3**
Digital Textile Manufacturing Technologies Implementation

Environmental Sustainability Analysis of Rotary-Screen Printing (RSP) vs Digital Textile Printing (DTP)
Kerry Maguire King, Department of Textile and Apparel, Technology and Management, North Carolina State University, Raleigh, North Carolina, USA
The global textile industry requires a more sustainable supply chain, particularly focusing on the coloration process, which poses significant challenges. Innovation is key, with emerging technologies like DTP showing promise in improving sustainability. A comparative environmental sustainability study between RSP and DTP was conducted in a realistic factory setting, evaluating a 16-color design on 1,000 m cotton fabric. The findings indicate that DTP is more environmentally favorable than RSP in terms of sustainability impacts.

Digital Integration, Digital Coloration & Cybernetics: The Future 'On-Demand' Textile & Sewn Products Supply Chain
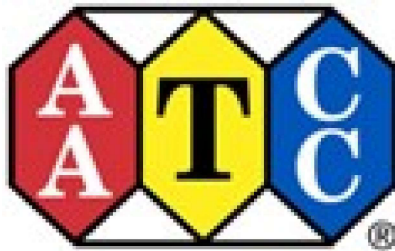Graham Page, CEO & Co-Founder, iAtelier Inc., Chapel Hill, North Carolina, USA
Developing a digitally integrated, cybernetic supply chain is crucial to address key challenges in the Textile & Sewn Products Supply Chain. This approach enables on-demand manufacturing in the western market and fully utilizes digital tools in design and consumer-facing aspects. Such a supply chain emphasizes digital on-demand manufacturing, reduces overproduction, and promotes sustainable processes, especially in coloration. Robotics, equipped with innovative end effectors, will play a pivotal role in handling raw materials and cut parts at scale.

4:00 pm **Adjournment**

Digital Textile Manufacturing Technologies Conference 2024

Industry Partner

https://www.aatcc.org

Media Partners

www.e-itn.net

www.timesinternational.in

https://textilevaluechain.in

Conference Speakers

Garry Atkinson
AATCC

Dr. Dan Harrison
Digital Imaging Materials
Consultancy

Dr. Alan Hudd
Alchemie
Technology

Kerry King
NC State

Graham Page
iAtelier

Johnny Shell
Keypoint
Intelligence

Harry Vine
Alchemie
Technology

DIGITAL TEXTILE MANUFACTURING TECHNOLOGIES' DISRUPTIVE POTENTIAL

Join us to learn how disruptive digital textile manufacturing technologies will be key incentives and drivers for meeting brand owners' goals, reducing environmental impacts, and enabling more profitable production by:

– Growing demand for more sustainable production
– Enabling economical shorter runs & less inventory
– Immediate & dramatic reduction of environmental impact
– Lowering energy consumption
– Reducing cost & yielding short-time ROIs
– Reshoring & enabling regional on-demand production
– Industry needs more profitable production
– Digital technology delivers immediate, dramatic, environment and cost benefits

SPEAKER-DISPLAY SPONSORSHIPS

IMI and Alchemie Technology are pleased to offer the **Digital Textile Manufacturing Technologies Conference 2024 Speaker-Display Sponsorship** to enable digital textile manufacturing technology suppliers and developers to give a presentation on their technologies and have a display during the conference.

These Speaker-Display Sponsorships are designed to expand the number of industry suppliers able to position themselves "front and center" before a key group of textile and apparel industry leaders - PLUS distributing their message to IMI's global database of over 15,000 relevant contacts. Sponsors will also receive recognition, exposure, and publicity via multiple channels as described below!

Our goal is to develop a "digital textile community" focused on generating excitement about rapidly expanding digital textile manufacturing technologies - thus benefiting all industry participants.

The Digital Textile Manufacturing Technologies Conference 2024 Speaker-Display Sponsorship includes sponsors' benefits, exposure, and recognition as follows:

– Conference presentation on your technology
– Conference display during the conference
– Two conference registrations including the speaker
– Corporate description, logo, and link on conference web page
– Corporate logo in conference brochure
– Corporate logo in all conference emails
– Press release announcement of sponsorships
– Publication of sponsor generated blog on IMI blog site (mutual Sponsor/IMI agreement of topic)
– Announcement of sponsor on social media (LinkedIn/X/Facebook)
– Inclusion via mentions in additional conferencepromotional materials
– Recognition of sponsors during conference sessions
– Available for an all-inclusive fee of $5000 USD

If you have any questions or wish to discuss any aspect of the **Digital Textile Manufacturing Technologies Conference 2024 Sponsorship** opportunities, please contact Al Keene al@imiconf.com or phone +1-207-235-2225.

HOTEL RESERVATIONS

The **Digital Textiles Manufacturing Technologies Conference 2024** is being held at the DoubleTree Suites by Hilton Charlotte-SouthPark in Charlotte, North Carolina. Hotel reservations are the responsibility of each program participant. The conference room rate is $179 per night and includes internet service. Early booking is advised as the group rate is guaranteed only until May 27, 2024.

Reservations can be made by calling Hilton Reservations (877-667-7214) or +1-704-364-2400 and identifying the event as the Digital Textiles Conference.

Hotel reservations can be made online at https://tinyurl.com/DigitalTextileHiltonRes

DoubleTree Suites by Hilton Charlotte-SouthPark
The DoubleTree Suites by Hilton Charlotte-SouthPark is less than ten miles from the Charlotte Douglass International Airport. Taxi service from the airport to hotel is available. Estimated Uber and Lyft fares are $25-$40. For those attendees driving, the DoubleTree Suites by Hilton Charlotte-SouthPark is conveniently located to both I-77 and I-85. Hotel parking is complimentary for conference attendees.

The DoubleTree Suites by Hilton Charlotte-SouthPark is conveniently located in the SouthPark neighborhood adjacent (a 2-minute walk) to the upscale SouthPark Mall. At nearly 1.8 million square feet, SouthPark Mall is the largest shopping mall in Charlotte and the Carolinas.
Among the 150+ stores, SouthPark Mall features Abercrombie & Fitch, Apple, Burberry, Dillards, Gucci, Lilly Pulitzer, Lego, Louis Vuitton, Macys, Neiman Marcus, Nordstrom, Paul Simon, Saint Laurent, Tiffany & Co. and much more. There are also numerous additional shopping and dining options in the adjacent area. The DoubleTree Suites by Hilton Charlotte-SouthPark offers shuttle service within a 3-mile radius of the hotel. In addition to being home to the mall, SouthPark is also a residential area and one of the larger business districts in Charlotte.

Overlooking Symphony Park (great place for a relaxing walk or jog), The DoubleTree Suites by Hilton Charlotte-SouthPark has an outdoor pool with a waterfall, a fitness center, and dining (The Market Café & The Bankers Club Lounge). As the only SouthPark all suites hotel, The DoubleTree Suites by Hilton Charlotte-SouthPark offers 207 newly renovated, well-appointed 700+ square feet spacious suites with kitchenettes or wet bars, Sweet Dreams® by DoubleTree sleep experience, wireless high speed internet access, coffee & tea by The Coffee Bean & Tea Leaf, two remote control flat screen TVs, two telephones, voicemail & data port, and Crabtree & Evelyn® bath products.

Charlotte is known as the International Gateway to the Southern US and Charlotte's Douglas International Airport is the sixth busiest airport in the world. It serves over 40 million passengers per year with competitive fares and convenient fight schedules from more than 140 nonstop destinations. Nearly 60% of the US population is within a two-hour flight of Charlotte.

Charlotte is the center of the United States' sixth largest urban region with over 7 million people living in a 100-mile radius. Charlotte is a major Southeastern US hub with major manufacturing, energy, healthcare, educational and financial facilities. Nearly 300 Fortune 500 companies have facilities in the Greater Charlotte metro area which is a major manufacturing force.

The DoubleTree Suites by Hilton Charlotte-SouthPark along with City of Charlotte www.visitcharlotte. com and State of North Carolina www.visitnc.com provide excellent opportunities to extend your visit into a memorable vacation experience.

The DoubleTree Suites by Hilton Charlotte-SouthPark address is:
6300 Morrison Boulevard
Charlotte, NC 28211 USA
Phone: +1 704-364-2400
Fax: +1 704-367-9912
 https://tinyurl.com/IMIDoubleTree2024

IMI

IMI sponsors conferences and courses worldwide to assist in understanding technology developments, markets, and applications requirements. IMI conferences and courses offer unique opportunities for leading hardware, technology development, consumables, software, and user companies to learn, network, and develop a comprehensive understanding of current as well as future developments impacting successful product implementations, market entry/expansion, and technology utilization. Since 1990, IMI has held over 700 programs attended by well over 25,000 technical, marketing, and management personnel from companies around the world.

IMI programs are designed to enable attendees to obtain the latest technical, market, and application information while allowing time to network with other attendees in a timely and cost-efficient manner. Attendance at an IMI program enables attendees to meet with an industry's leading experts in a single location over a short period of time thus maximizing information transfer efficiency and minimizing travel and time expenses.

For additional information. contact:
IMI Carrabassett Valley, ME USA

Phone: +1-207-235-2225
Email: imi@imiconf.com
Website: www.imiconf.com

Alchemie

Alchemie's mission is to transform the textile industry with dyeing and finishing solutions that eliminate the environmental impact of these polluting processes.

The key benefits of our digital approach to textile dyeing and finishing are:
- Reduction of energy consumption by >85%
- Elimination of waste water emissions by >95%
- Significant cost reductions of >50%
- Digital manufacturing agility to address the ~25% of materials waste in the supply chain

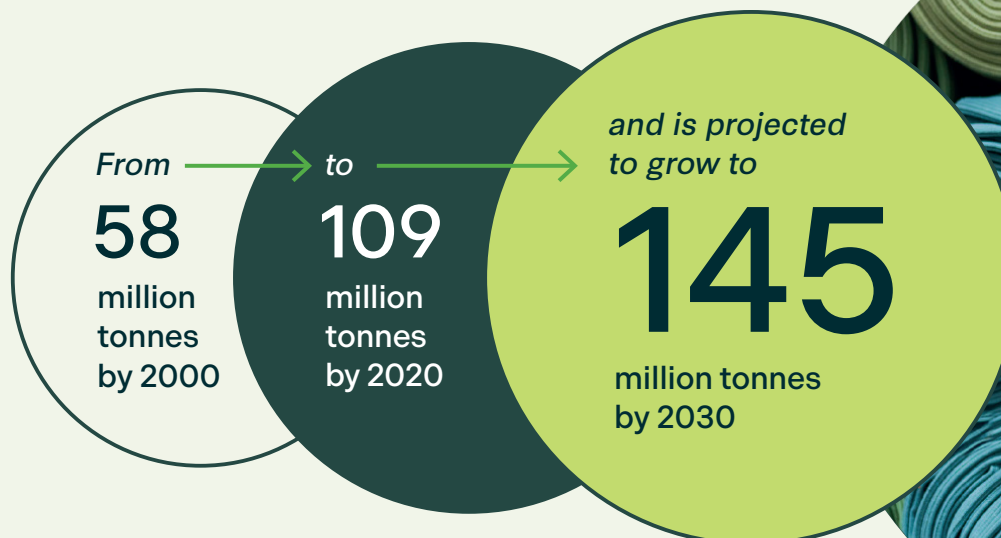**About Alchemie's solutions:**
- Alchemie Endeavour™ is a breakthrough waterless, low-carbon, digital dyeing technology,
- Alchemie Novara™ is a non-contact, low energy, low chemistry, digital finishing solution
- Alchemie Discovery is a lab system that replicates the production of Endeavour™, and can be used for recipe development, color matching, and new material process development.

For additional information. contact: Alchemie Technology, Duxford, Cambridgeshire

Details on all of Alchemie Technologies' activities can be found on our website www.alchemietechnology.com

TEXTILE PRODUCTION
Global textile fibre production has almost doubled:

From
58
million tonnes by 2000

to
109
million tonnes by 2020

and is projected to grow to
145
million tonnes by 2030

Source: European Environment Agency (ETC-CE Report 2023/5)

REGISTRATION INFORMATION

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Charlotte, North Carolina

Delegate Registration Fee: $750 per registrant
                               $700 for each additional registrant from same company when
                               registered as a group.
Academic Registration Fee: $395 per registrant (student, faculty, or staff)

The registration fee includes attendance at all sessions, all scheduled conference functions, and the conference reference materials. Conference dress is casual.

Cancellations will receive a 100% refund if made 5 days prior to the start of the program. Substitutions may be made at any time. Cancellations made less than 5 days prior to the start of the conference will not receive a refund but will receive an electronic copy of the conference reference materials.

To register as a delegate for the **Digital Textiles Manufacturing Technologies Conference 2024**, submit the registration form to Susan Vandrey, Conference Administrator, IMI, 1106 Valley Crossing, Carrabassett Valley, ME 04947 USA. You may reserve space by calling +1-207-235-2225, faxing +1-207-560-9119 or emailing **imi@imiconf.com** or visiting **www.imiconf.com**

REGISTRATION FORM

Digital Textiles Manufacturing Technologies Conference 2024
June 10-11, 2024

DoubleTree Suites by Hilton Charlotte-SouthPark, Charlotte, North Carolina

☐ **Please send me information on Speaking/Display/Sponsorship Opportunities**
☐ **Please add me to Conference Email List**
☐ **Check here for academic registration fee**

☐ Mr. ☐ Ms. ☐ Miss ☐ Mrs. ☐ Dr.

NAME
_____

_____
COMPANY

COMPANY ADDRESS

CITY   STATE   ZIP

COUNTRY

BUSINESS PHONE

BUSINESS EMAIL

If registering for this conference, the above information will be distributed to conference attendees unless you request not to be included in the distributed conference database.

Please check your desired method of payment:

☐ Credit Card   ☐ Invoice