IRI | 2023 ANNUAL CONFERENCE
May 22–25
Philadelphia, PA

Monday, May 22

8:30am – 12:00pm	*IRI Board of Advisors*
1:00pm – 5:00pm	*IRI Committee Meetings*
5:00pm – 6:00pm	***Welcome Reception***

Tuesday, May 23

8:00am – 9:15am **Welcome Remarks and Opening Keynote**	**Welcome Remarks** *IRI Vice Chair Matrice Jackson (Kimberly-Clark Corporation)* **Forging the Hybrid Workplace: Flexible Work in the AI Era** *Keynote Speaker: Dr. Alexandra Samuel (Author and Data Journalist)* We're in a new hybrid workplace: One that's already been transformed by the growth of flexible work arrangements in which many employees divide their time between workplace and home, and one that is about to be transformed by the widening adoption of artificial intelligence. Managers are now charged with fostering trust and collaboration between on-site and remote/flexible employees, and increasingly, with finding a path towards effective collaboration between humans and AIs. This provocative session provides a framework for tackling both challenges so that we can build strong, innovative organizational cultures. We'll look at how to unleash powerful new forms of collaboration by shifting our models of accountability, collegiality and flexibility—as managers, as leaders and as professionals facing new levels of digital and meeting overload. And we'll look at how the experience of remote and flexible work provides a foundation for embracing the opportunities of AI, while renewing our teams and organizations.
9:30am – 10:15am	**Conference Networking Kick-off**

Keynote Panel	
10:15am – 11:00am	**Networking Break**
11:00am – 12:00pm **Breakout Session**	**Reducing Uncertainty in Breakthrough and Transformational Opportunities through Ecosystem Immersion** *Speaker: Margaret Pafford (Lubrizol) and Mark Putnam (NewEdge, Inc.)* Breakthrough and transformational growth opportunities can create confusion and frustration for organizations regarding if and how to move forward. How does an organization explore an area that is vastly different than their current businesses, capabilities and knowledge base. How can leaders make decisions with more confidence throughout an innovation journey when many unknowns exist. In this session, we will showcase multiple examples from Lubrizol Corporation on how they have leveraged and embedded themselves in external ecosystems to build foundational knowledge in new and transformational growth areas. In the process, speeding up buy-in, reducing uncertainty, increasing confidence and driving action within the organization. Additional topics will include; How to identify the right ecosystems? Various ways to engage with ecosystem experts. Learnings that Lubrizol had during their journey.
11:00am – 12:00pm **Breakout Session**	**Innovation ROI Best Practices** *Speakers: Greg Lemmon (Eureka! Ranch International)* Innovation ROI is difficult to measure for organizations. It is a complex system with many inputs, outputs, stakeholders, and milestones. Without a clear understanding of the overall system's performance toward a specific aim, it can be difficult to manage, predict and finance your innovation efforts. This IRI PILOT project team is working to determine the best practices for measuring the ROI of innovation. Specifically including WHAT to measure, WHEN to measure and HOW to go about collecting the data in a way that is reliable and systematic. Learn more about this IRI PILOT Research project.
11:00am – 12:30pm **Breakout Session**	**Strategic Portfolio Management simulation (90-minutes)** *Speaker: David Matheson (SmartOrg)*

	Experience a career of portfolio decisions in 90 minutes with this interactive portfolio simulation. Will your innovation portfolio drive the growth you need? Where and how much should you invest? This interactive simulation of portfolio decisions and results reveals the crucial and surprising differences between operational and strategic portfolio management. In this workshop, you'll learn how to: · Evaluate projects to a common standard · Juggle choices across competing areas · Resolve conflict · Power your company to meet its growth goals
12:00pm – 1:15pm	**Lunch**
1:15pm – 2:15pm **Breakout Session**	**Roundtable: Sustainability and Innovation (*from the IRI Sustainability Community*)** *Speakers/Panelists: Amy Costello (Armstrong World Industries), Lee Green (IRI), Jamie Pero Parker (RTI International)* What metrics should you use to calculate the ROI on your sustainability initiatives? How should sustainability drive your innovation priorities and the focus of your new product development team? How can you keep better track of the shifting regulatory landscape? Join us for a panel discussion on these key sustainability topics followed by a peer to peer exchange of ideas and best practices on how to integrate sustainability and innovation. Learn more about **IRI's Sustainability Community**
1:15pm – 2:15pm **Breakout Session**	**The Human Side of Digital Transformation** *Speaker: Brant Cooper (Moves the Needle)* The increased complexity and interconnectedness of the digital world brings massive amounts of uncertainty to the business community. But the way we've traditionally managed companies is based on the simpler, assembly-line constructs of the Industrial Age. But we're not in the Industrial Age any longer. Company leadership and employees require a new mindset - one that can match the speed and agility of today's economic activity while solving real-world problems that benefit us all. This session charts a path forward to creating RAD organizations: **resilient** to endless disruptions, **aware** of changing customer needs, and **dynamically** able to change course to create real value. Based on his 5Es of the RAD mindset - empathy, exploration, evidence, equilibrium, and ethics -

	attendees will receive inspiration and practical, actionable advice on how to kick-start and accelerate meaningful change inside their organizations.
1:15pm – 2:15pm **Breakout Session**	**Magnifying Innovation: Understanding Organizations' Adoption of Novel Design Practices** *Speakers: Michael Helms, Julie Linsey (Georgia Institute of Technology)* Transformative design methods: Where are we and what works? Prof. Julie Linsey and Dr. Michael Helms, design theorists from Georgia Tech's department of Mechanical Engineering, will lead an exploratory roundtable discussion regarding the adoption and use of novel techniques to drive transformative design, such as biologically inspired design and patent mining, with a focus on understanding the catalysts for and barriers to their use. They will also briefly discuss the research goals of their NSF sponsored Magnifying Innovation project.
2:15pm – 2:45pm	**Networking Break**
2:45pm – 3:45pm **Keynote**	**The Evolution of the Corporate R&D Organizational Chart: How Diverse R&D Teams Drive Innovation** *Speaker: José Méndez-Andino (EVP and Chief of R&D, Owens Corning)* The role of corporate R&D is evolving as companies from every industry face disruption and more high-stakes challenges than ever before. Therefore, R&D leaders must challenge the status quo as they seek new, innovative solutions to complex challenges from sustainability to advanced manufacturing and everything in between. And while inclusion is a precursor to innovation, how should leaders really be thinking about inclusion in the lab? While some are just beginning to work toward a more representative team, those who are ready to look further must now consider multidisciplinary approaches inclusive of Human Science. We'll explore the inner workings of a truly diverse R&D team, and the inclusive environment required for breakthrough innovation. Because natural sciences and engineering alone can't invent all that is required to build a sustainable future. And the world is counting on us.
4:00pm – 5:00pm **Keynote**	**Beyond Cutting Edge: Unleashing Innovation and Opportunity for the Future of Space Exploration** *Speaker: Peter Hughes (CTO, NASA Goddard Space Flight Center)*

	This talk will explore the exciting advancements in technology that are rapidly turning science fiction into reality for future space missions. The focus will be on critical technologies that NASA is developing to facilitate scientific discovery and enable space exploration. Additionally, the talk will cover emerging technologies that are currently being developed and NASA's approach to identifying and evaluating these technologies from non-traditional space sources and industries.
5:30pm – 6:30pm	**Networking Reception**
6:30pm – 8:30pm	Dine Around (sign-up required)

Wednesday, May 24

8:30am – 9:30am **Keynote**	**IRI2038 Futures Study Revisited: Leading Innovation on the Way to 2038** *Speaker: Christian Crews (Wavepoint)* In 2011, IRI launched the IRI2038 Futures Study to focus on one specific question: *How might future trends, developments, and events impact the art and science of research and technology management over the next 25 years?.* Led by Ted Farrington and Christian Crews, this project examined hundreds of trends, weak signals, and implications to develop four future scenarios and a 'Top Ten' of potential future trends and themes - such as the Hollywood Model, Augmented Humans, the Era of Women, Cognitive Computing, and more. What scenarios are still on track? What did the project get wrong? And what does this mean for the future of innovation? Read the original IRI 2038 Future Study Report.
9:45am – 10:45am **Keynote Panel**	**AI-Driven Supply Chain Optimization: Strategies for Resilience and Growth** *Speakers: Chelsea (Schneider National Chair of Transportation and Logistics, Georgia Institute of Technology)* This session will provide insights and strategies for leveraging AI and machine learning for a more resilient and efficient supply chain. Dr. Chelsea White and Alex Rhodeen will share their expertise in discussing questions such as:

	- How has artificial intelligence transformed supply chain management, and what are some of the key benefits that businesses can expect to see in the next five years? - What strategies and tools can be employed to improve supply chain resilience in the face of disruptions and uncertainties? - What are some of the key challenges that companies face when implementing digital supply chain solutions, and how can these be overcome? - What are the ethical considerations and challenges associated with the use of AI in supply chain management, and how can they be addressed?
10:45am – 11:15am	**Networking Break**
11:15am – 12:15pm **Breakout Session**	**MITRE Quick Ukraine Reponses Initiative - Leveraging Corporate Culture for Real World Impact** *Speakers: Michael Balasz and Karen Viani (MITRE Corporation)* Following the devastating Russian invasion of Ukraine, MITRE went into action. Learn about MITRE's rapid response to support Ukraine by developing practical technology-based solutions, ranging from refugee tracking to defense to war crimes documentation, within months of program launch. This session will outline how MITRE's culture, with a corporate-value foundation of speed, risk taking, and collaboration, enables employees to respond to situations and develop critical solutions at the speed of need. This case study presentation will discuss how MITRE was quickly able to bring diverse cross-organizational expertise to bear in response to the Russian invasion of Ukraine, and how these practices can be applied to your organization's innovation initiatives. As part of the presentation, the presenters will leverage the MITRE Innovation Toolkit to guide participants through identification of barriers and opportunities within their own organizations. Participants will be exposed to techniques and approaches to breeding an innovative, adaptable environment where speed, risk taking, and collaboration is rewarded.
11:15am – 12:15pm **Breakout Session**	**Organizing Time for Innovation** *Speaker: Heidi Bertels (CUNY)*

	Slack time, made popular by companies like 3M and Google, provides one way in which companies try to encourage innovation. During slack time, employees choose what projects to work on and how to complete them. While this concept is intuitively appealing, not much is known about how to effectively implement slack time. This research project takes a deeper dive into how companies organize slack time. By speaking to 17 IRI Members about their experiences with organizing or using slack time, we found that employees using slack time think and act like entrepreneurs. This entrepreneurial way of thinking and acting, which is quite different from managerial thinking, is called effectuation (Sarasvathy, S. D. (2001). Whereas managerial thinking relies on planning and analysis to prepare for a mostly predictable future, effectual thinking focuses on controlling an unpredictable future by taking action and solving problems using available resources. During this session, we will discuss the effectual model used by startup entrepreneurs and extend this framework to corporate entrepreneurs using slack time. We will then engage in a hands-on session where you will use effectual thinking to come up with creative ideas that could be pursued during slack time. References: Sarasvathy, S. D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. Academy of management Review, 26(2), 243-263. View original article on effectuation: https://journals.aom.org/doi/abs/10.5465/amr.2001.4378020
11:15am – 12:15pm **Breakout Session**	**Diversity, Inclusion, and Innovation: Creating a More Inclusive Workplace** *Speaker: Navin Kunde (former Head of Open Innovation, The Clorox Company)* Diversity, Equity and Inclusion initiatives had a resurgence during COVID, with increased awareness within the Fortune 500. A key concept within the Diversity Equity Inclusion space – Belonging – is the secret sauce to delivering impact from DEI initiatives. If Diversity is having a seat at the table, and Inclusion is having a voice, Belonging is believing that your voice will be heard. Belonging cannot be mandated by HR or C-Suite leaders; it must come from employees. Unfortunately, many organizations don't know how to measure Belonging, interpret results, and act on them in a way that improves a sense of Belonging among employees while driving business results. During this interactive roundtable, Dr. Navin Kunde, formerly head of Open Innovation at The Clorox Company, will

	share how the DEI culture team he led measured Belonging within R&D, interpreted the results, and then dove underneath the surface via employee focus groups to uncover barriers and potential solutions. He will discuss challenges in communicating the importance of increasing Belonging to leaders and managers, and the difficulty of putting in place practical steps to deliver this aspiration in a way that would be well-received by a skeptical R&D and innovation community. Dr. Kunde will discuss both Barriers to Belonging as well as the Solutions implemented at Clorox, but the ultimate goal of this session is to share his insights and experiences so they can be useful to other R&D and Innovation leaders and managers who are serious about improving Belonging.
12:15pm – 1:15pm	Lunch
1:15pm – 2:15pm **Breakout Session**	**How to use R&D to Strengthen Energy Transition, Reduce Market Risk, and Increase Company Value** *Speaker: Shah Karim (Saferock)* R&D plays a key role in company success by providing the right mix of operational and technical actions and narrowing the path to energy transition. Advanced Analytics such as market analysis, demand forecasts, and Inventory simulations support this. It's critical to have a responsive supply chain and manage spikes and force majeures, as COVID has shown. Supply shortages can have a devastating impact on your company and your customers. We will examine the key lessons learned, ideal ways to evaluate your current supply chain, and ways to make operations more resilient while preserving company value. Some questions that we will discuss: · What does success look like in 2023? · What lessons can be learned from energy transition, capital allocation, and market risk in terms of R&D leadership? · How to use big data to forecast demand and supply and prevent supply shortages? · How to think ahead and strengthen our supply chain for market uncertainties? · How can R&D leaders do to make the company attractive for key investors?
1:15pm – 2:15pm	**The Human Side of Technology: Leading People Through Digital Transformation:** *Speakers: Beth Dawson (Mars, Inc.), Cliff Tironi (Thinaer)*

Breakout Session	This IRI PILOT Research project will address ways that IRI leaders can effectively lead employees through the speed of today's technological change, with focus on change management in an agile environment, resistance management and capability building, and reinforcement. They will research what is working, and what isn't, at large, legacy companies. As a result, this research will provide specific recommendations for how to adopt an agile people-first approach to change management, and recommend best practices leaders can take to cultivate the acceptance and ability needed to guide employees through successful digital transformation across their company. Learn more about this IRI PILOT Research project.
1:15pm – 2:15pm **Breakout Session**	**DuPont's Spark Digital Academy: Upskilling for the Future** The Spark Digital Academy is DuPont's response to its growing need to create a bottom-up culture of data know how, agility, and experimentation across the organization, train workers on the use of data and digital technologies, and signal the company's priority in digital innovation. It was also created in response to the increasing competition to recruit technical talent and the shortage of potential employees with disciplinary and technical skills. Hear from those involved with the Academy about their efforts to create and sustain this program. They will expand on their key takeaways so far: 1. Build from and scale to the entire organization using existing learning and development programs. 2. Work to meet the needs of the individuals and the organization. 3. Connect digital training programs to the realities of the job market. 4. Promote the roles of executives as sponsors, students, and advocates. 5. Decide on a balance of experiential, peer, and formal instruction that works for the audience and the type of learning they seek. 6. Encourage group work in experiential projects. 7. Consider the additional workload reskilling programs bring to employees and design curriculum and program elements for flexibility. 8. Create a scalable digital infrastructure. 9. Launch a digital academy not as an isolated effort but as part of a broader digital transformation action plan.

2:15pm – 2:45pm	**Networking Break**
2:45pm – 3:45pm **Keynote Panel**	**Creating a Greener Future: Sustainable Materials and Product Development** *Panelists: Kelsey Bergan (DuPont), Laura Buen Abad (Sonoco Products), Rebecca Collins (Temple University), Becky Kristopeit (Henkel)*
4:00pm – 5:00pm **Keynote Panel**	**Industry 4.0 and Beyond: Shaping the Future of Manufacturing** *Panelists: Catherine Clark (Corning Incorporated), Rui Marreiros Cação (Crown Holdings), Irene Petrick (Intel Corporation), John Reid (University of Illinois at Urbana-Champaign)* Join panelists **Catherine Clark** (IT Director of Manufacturing, Corning Incorporated), **Rui Marreiros Cação** (R&D Global Director of Engineering and Digital Transformation, Crown Holdings, and **Irene Petrick** (Retired Senior Director of Industrial Innovation, Intel Corporation) on Wednesday, May 24 as they discuss the future of Industry 4.0: - How the COVID-19 pandemic has changed the trajectory of Industry 4.0 transformations - What new challenges do manufacturers face? - How are Industry 4.0 practices driving sustainability initiatives? - Is Industry 5.0 on the horizon?
6:00pm – 7:00pm	**Awards Reception**
7:00pm – 8:30pm	**IRI Awards Dinner**

Thursday, May 25

9:00am – 12:00pm	**Tech Treks**

	Attendees can choose from a selection of off-site field trips to Philadelphia-area manufacturing facilities, university labs, and more. These field trips feature both a tour and interactive breakout session. Pre-registration is required as space is limited to 35 seats per site. A shuttle bus will transport groups to their field trip location and then to the Philadelphia International airport (arriving no later than 1:30pm ET). Visit the conference website for more information. - **DuPont Wilmington Global Innovation Center** - **Campbell Soup Company Headquarters**