

CTO LOOK

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MOST TRAILBLAZING LEADERS REVOLUTIONIZING 3D PRINTING IN 2025

Manager of Sales and
Market Development
Insight Polymers &
Compounding

MATHEW TOROSIAN

TRANSFORMING POLYMER SCIENCE INTO
COMMERCIAL SUCCESS



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In factories where molecules are charted and matter is manufactured, where small is large and science is business, there is a silent revolution retooling industries. Polymers, the sorcery chains of repeating molecular building blocks, have been the quiet pillar of the modern world. They insulate our footsteps, power our machines, package our medicines, and enable technology that was once unimaginable. But standing behind all of those molecular miracles are individuals with a rare combination of scientific expertise, strategic acumen, and a genius-on-the-edge problem-solving capacity. And one of them is one such innovation guru by the name of **Mathew Torosian**.

With his nomination as **Sales and Market Development Manager at Insight Polymers & Compounding**, Mathew occupies a unique position among material experts globally. He is an interpreter and visionary who desires a conciliation between polymer chemistry and real industrial solutions. His work impacts nearly everything- the phone in your pocket, the auto components that make cars safe, the medical equipment that prolongs and improves life, and the factory tools that make goods tomorrow. In an industry whose performance expectations are higher and whose sustainability demands are fraught with stressful strategic thinking, Mathew is a new generation one of a kind: where there is rigorous scientific cognition as much as co-creation with the customer, where alignment brings out the best, and where breakthrough innovation is no longer a question of single brilliance but partnership. This is the story of a master who never purchases raw materials but purchases the subtle ballet of converting scientific possibility marketplace reality.

The Genesis: Where Passion Meets Purpose

Every transformative career begins with a spark. It's that moment when curiosity ignites into calling. For Mathew, that spark flickered to life in 1986 at Illinois State University. A mentor named Dave Weede opened an unexpected door, introducing him to the IT Plastics program. What Mathew discovered there wasn't just an academic discipline; it was a revelation about how science manifests in the physical world.

Unlike theoretical pursuits that remain confined to journals and equations, polymer science offered something profoundly satisfying: the ability to hold creation in your hands. Mathew fell in love with the practical application of polymers, with the elegant process of matching molecular structures to performance requirements, and with seeing

ideas materialize into objects that populate shelves, pockets, and lives. This wasn't abstract knowledge for its own sake. This was engineering with purpose.

"These materials and parts touch our lives in so many ways," he observes, his enthusiasm undiminished by decades in the field. "There are almost no areas of our everyday lives that are not impacted by plastic components, engineered to meet the application requirements for these products to function properly." This philosophy, that every compound serves a purpose, every formulation solves a problem, has guided his journey through an industry that never stops evolving.

Transformation at Chevron: When Listening Becomes Strategy

Before Insight Polymers and before the leadership roles and strategic partnerships, Mathew underwent his baptism by fire at Chevron Chemical. Working in Technical Service, he began learning what would become his most valuable skill: the art of listening. Not the passive hearing of words, but the active excavation of needs, requirements, and possibilities hidden within customer conversations.



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Both sides need to collaboratively flush out all the application requirements."

Chevron Chemical faced a brutal reality. Their product line was inferior, shrinking, a punchline in industry circles. It was a \$50 million business bleeding market share, and prospects looked grim. But transformation was brewing. The company was qualifying new technology, and Mathew had a front-row seat to one of the most dramatic turnarounds in polymer history.

Through strategic innovation, relentless validation, and genuine customer engagement, Chevron Chemical metamorphosed. That struggling \$50 million business exploded into a thriving \$300+ million enterprise. They became the premier supplier of HDPE for Injection molded and extrusion packaging, the name that came first to mind when engineers specified materials. Mathew absorbed lessons that textbooks cannot teach: superior

technology without customer understanding remains potential energy, listening converts knowledge into value, and trust accelerates innovation.

His second transformative experience unfolded at Jabil, where the canvas expanded dramatically. Here, Mathew developed materials across a breathtaking spectrum of applications- medical devices that interface with human biology, electronics that process information at lightning speeds, automotive components subjected to punishing conditions, and materials handling systems that move global commerce. As Director of Business Development and Director of Product Management, he saw both sides of the business equation simultaneously.

These dual roles revealed fundamental truths about successful innovation. Go-to-market strategies, product development roadmaps, strategic alignment with OEMs, and coordination between business development and operations; these weren't separate functions but interconnected systems. "Without good communication and market intelligence, these businesses cannot achieve their full potential," he notes, articulating wisdom earned through experience, not speculation.

The Insight Philosophy: Where Science Meets Collaboration

At Insight Polymers & Compounding, Mathew has found an environment uniquely aligned with his collaborative philosophy. The company specializes in custom and speciality formulations, but what truly distinguishes Insight is its approach to solving complex material challenges. Mathew's influence permeates this process, shaping how teams engage with customers and tackle seemingly impossible requirements.

"It all starts with communication and trust," he explains, and these aren't mere platitudes. Every successful project begins with a deep excavation of requirements, not just the obvious specifications, but the complete landscape of performance needs. Physical properties, testing protocols, regulatory constraints, environmental exposures including UV degradation, flame retardancy requirements, temperature extremes, colour specifications, electrical characteristics, coefficient of linear thermal expansion, thermal conductivity. The list extends far beyond simple material selection.

This collaborative excavation demands trust on both sides. Clients must share proprietary application details, while

Insight must commit expertise and resources before guaranteed outcomes. These requirements become project goals and roadmaps guiding development through uncharted territory.

What happens next separates Insight from conventional compounders. The company's founders, AJ Pasquale and Jeremy Lizotte, both hold PhDs in Polymer Science from Virginia Tech, one of the world's premier polymer chemistry programs. When customers engage with Insight, they're not simply buying compounds; they're accessing deep scientific and process knowledge applied systematically to their specific challenges.

Orchestrating Innovation: Leadership Beyond the Lab

While Mathew's hands-on laboratory days have largely passed, he remains intimately connected to technical processes. He works shoulder to shoulder with technical teams and customers, orchestrating the collaborative culture that defines Insight Polymers. He does some 3D printing at home, maintaining tactile connection with materials, but development work now flows through carefully managed collaboration between himself, his team, AJ and Jeremy's polymer expertise, and insights from operations.

Insight's collaborative culture leverages collective intelligence- past experiences, academic knowledge, published research, and specialized expertise in specific domains. Mathew has observed that career progression naturally moves professionals away from shop floors and laboratory benches. This evolution makes managing collaboration even more critical. His role focuses on four essential functions: identifying promising projects, excavating comprehensive requirements, formulating multiple solution pathways, and validating results rigorously.

Carbon Nanotubes: A Technology Whose Time Has Arrived

When discussing breakthroughs that marked inflection points for Insight Polymers, Mathew's enthusiasm becomes palpable. CNT technology, Carbon Nano Tubes, represents their most significant innovation, a technology with transformative potential across multiple industries.

Carbon nanotubes emerged over two decades ago amid tremendous hype. Scientists promised revolutionary improvements in material properties, but reality disappointed. For twenty years, the industry could only



extract conductivity benefits, useful in certain applications but far short of the promised revolution. Physical property improvements were perpetually claimed but never substantiated, until now.

Insight's CNT technology delivers what decades of research promised but couldn't achieve: simultaneous improvements in electrical conductivity, mechanical properties, and processability. This breakthrough opens doors for higher-performing, lighter-weight, easier-to-process materials across electronics, materials handling, drones, defence and aerospace, jigs/fixtures/tooling applications, packaging, medical devices, and oil and gas equipment.

Consider electronics manufacturing, where traditional approaches required 20% carbon black loading into totes and bins to achieve necessary conductivity. High carbon black loadings create nightmarish production conditions—messy, difficult to handle, and presenting significant environmental health and safety challenges. Once produced, these heavily loaded compounds exhibit poor processability, reduced impact strength, and compromised durability.

Insight's CNT technology achieves ESD protection at just 3% loading, producing components that won't damage electronics through static discharge while simultaneously improving processability, impact strength, and ductility. This isn't incremental improvement; it's a paradigm shift.

Alignment: The North Star of Organizational Excellence

Every technical leader operates from core principles, philosophical anchors that guide decision-making through complexity and uncertainty. For Mathew, that anchor is captured in a single word: alignment. Whether discussing strategic direction for the entire organization or tactical execution on specific projects, alignment remains paramount.

"We work in groups and teams," he explains with characteristic clarity. "Without alignment, on both strategic and tactical actions, no organization can reach its full potential, in my opinion." This isn't abstract management theory; it's practical wisdom about how organizations accomplish difficult objectives. Product strategies, technology pursuits, growth plans, and implementation approaches—all require synchronized effort toward shared goals.

Sustainability Without Compromise: The Environmental Imperative

The polymer industry faces mounting pressure to address environmental concerns, with sustainability and circularity dominating strategic conversations. Mathew's perspective on environmental responsibility directly influences which materials Insight develops and how they approach innovation.



"Using deep polymer science knowledge is differentiating from any of the compounders I have worked for and with in the past. This collaboration and stage of the process is what really drives me and stimulates my desire for creativity and tangible results."

Insight focuses primarily on sustainability rather than circularity, recognizing that while both merit pursuit, circularity impacts large-scale packaging applications where global compounders operate most effectively. Instead, Insight targets PFAS-free materials, natural reinforcements including hemp, sustainable alternatives to conventional fillers, and polymer alloys that eliminate environmentally harmful additives like PFAS and BPA.

The challenge lies in maintaining or improving performance while removing these problematic materials. Bad-actor additives exist because they work; they provide attributes that applications require. The innovation comes from discovering alternative approaches that accomplish the same objectives through environmentally responsible means without performance compromise.

Continuous Learning in a Dynamic Landscape

As someone deeply rooted in materials science, Mathew maintains his learning curve through constant project engagement and collaboration with customers, often working with scientists he describes as "way smarter than me." This humility, combined with curiosity, keeps him engaged and learning continuously.

Mathew believes firmly in continuous learning through all available means- reading, coursework, collaboration, and engagement with emerging business and technology areas. This commitment ensures he remains at innovation's leading edge.

Legacy and Vision: Building Tomorrow's Solutions Today

When considering legacy, Mathew envisions Insight Polymers as the premier high-performance compounder that engineers and businesses seek when facing complex material challenges. Through this pursuit, Insight creates opportunities to make multiple industries more successful through lightweighting, improved wear performance, enhanced durability, and breakthrough capabilities.

"If we are successful, those applications and success stories would be our long-term legacy," he reflects, focusing on impact rather than personal recognition. It's a fitting perspective for someone who champions collaboration and alignment.

For young professionals aspiring to bridge science, engineering, and entrepreneurship, Mathew offers straightforward advice: fully commit to your chosen industry. When you commit genuinely to engagement, to helping others, to learning the business and technology comprehensively, the rewards transcend monetary compensation. Self-satisfaction that cannot be taken away emerges from this commitment.

"It is through this commitment that the bridge will come into view and connect the business, science and technology, engineering, and processes," he concludes, offering a roadmap built on dedication, curiosity, and collaborative excellence.

Mathew's career demonstrates that technical industry success requires more than scientific knowledge. It demands communication, alignment, strategic vision, and unwavering commitment to solving genuine problems. At Insight Polymers & Compounding, he continues building that bridge between molecular possibility and material performance, one innovative compound at a time, proving that the future belongs to those who can translate complexity into clarity and science into solutions. ©