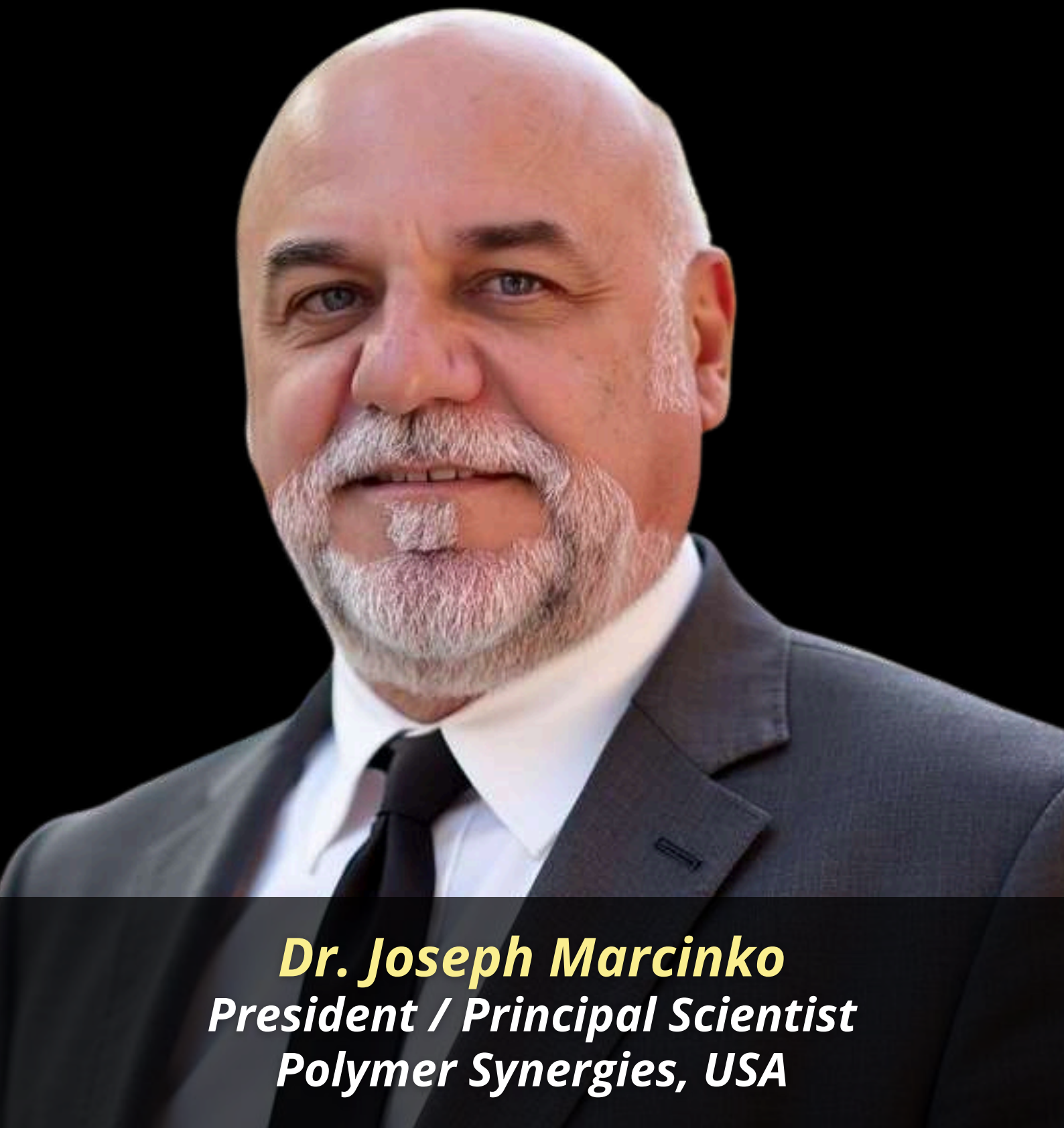


A TechnoBiz E-Magazine for Global Polyurethane Industry

PUReview

Issue - 1 | 8-14 December 2025 | <https://publication.technobiz.org>



Dr. Joseph Marcinko
President / Principal Scientist
Polymer Synergies, USA



Growchem



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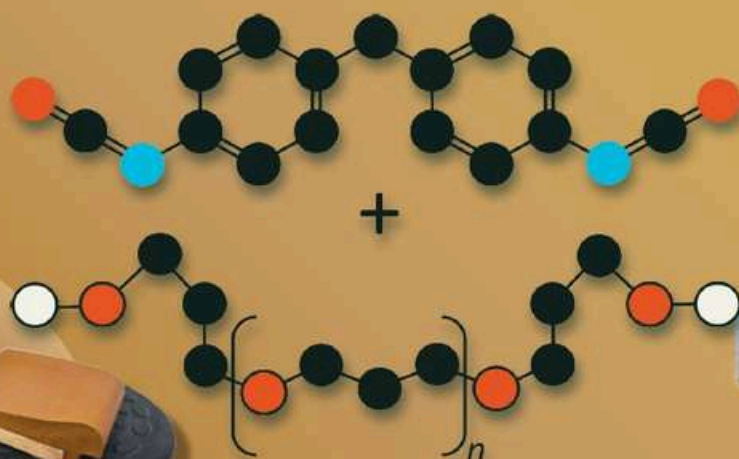
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Uncoated Fertilizer



Rotating Drum

Adding The Coating Resins

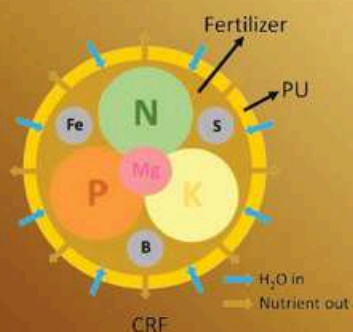
Preheat The Fertilizer

Rotating The Drum

Curing



Coated Fertilizer

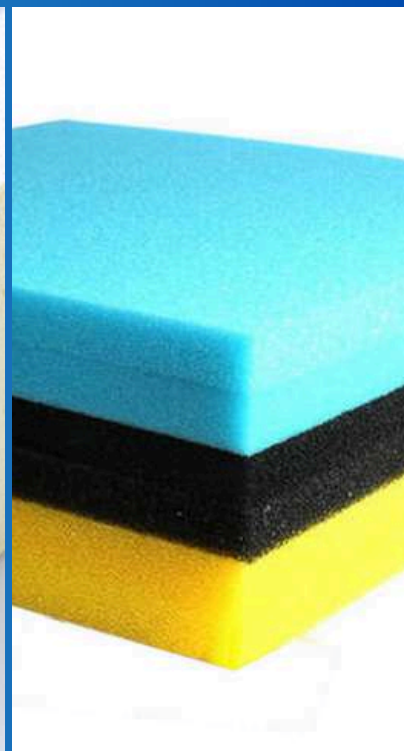


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30 Mar-2 Apr 2026
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ASIA
POLYURETHANE
& ADHESIVE EXPO

30-31 March 2026
Kuala Lumpur
Malaysia

World Trade Centre
10am-6pm

APBA
CONFERENCE

30-31 March 2026
Kuala Lumpur, Malaysia
World Trade Centre, 10am-6pm

Sustainable
PU Industry
FORUM

1 April 2026
Kuala Lumpur, Malaysia
Seri Pacific Hotel | 9am-5pm

Polyurethane
Executive
Dinner

30 March 2026
Kuala Lumpur, Malaysia
Seri Pacific Hotel, 7pm-10pm

Polyurethane
Research Fair

30-31 Mar 2026
Kuala Lumpur
World Trade Centre

POLYURETHANE
TRAINING

1-2 April 2026
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PUReview

*A Weekly E-Magazine for
Polyurethane Business*

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COVER STORY

Conversation with
Dr. Joseph Marcinko
President / Principal Scientist
Polymer Synergies, USA

*In this inaugural issue of **PU Review**, we are honored to spotlight a visionary whose influence spans more than four decades across polyurethane chemistry, adhesion science, bio-based materials, composite technologies, and industrial research leadership.*

***Dr. Joseph J. Marcinko** - Founder, Principal Scientist, and President of Polymer Synergies LLC, stands as one of the most respected minds in the global polyurethane community. With over 40 years of industrial R&D, research management, and academic teaching experience, Dr. Marcinko has shaped the way industries understand structure–property relationships in polymeric systems. His remarkable portfolio includes more than 60 peer-reviewed publications, 22 patents, globally delivered industrial short courses, and impactful consulting assignments with leading companies and research institutions worldwide.*

From his foundational work at ICI/Huntsman Polyurethanes to more than two decades of innovation through Polymer Synergies, Dr. Marcinko has consistently championed scientific rigor, sustainability-driven thinking, and practical problem solving. His contributions in polyurethane chemistry, biopolymer adhesives, wood and agricultural fiber composites, and polymer characterization continue to guide material innovation across multiple sectors.

As an educator, mentor, consultant, and inventor, he represents a rare blend of deep academic scholarship and real-world industrial impact. His professional journey offers inspiration not only to seasoned polymer professionals but also to the next generation of chemists, engineers, and innovators.

In this special cover story, we explore his insights, lessons learned, scientific philosophy, leadership values, and vision for the future of polyurethane technology.



Early Journey & Foundations

You hold degrees in Biology, Chemistry, and advanced Chemistry. How did this multidisciplinary foundation shape your approach to polymer science and polyurethane chemistry?

I have always enjoyed nature and the sciences that can help describe and provide an understanding of natural things. Scientists typically study the things they like. I enjoy Biology and Chemistry. As I matured, I realized that many of the things we study are related to other disciplines. One example of this is the relationship between polyamide and protein chemistry. One is a synthetic macromolecule and the other a natural macromolecule, but both are characterized by a backbone of repeating amide linkages, which are called peptide bonds in proteins. Another example is condensation chemistry. Condensation reactions are used to make polyurethane polyols, and nature uses condensation chemistry to make cellulose and many other natural materials. As I started my in-depth study of polyurethanes, I looked for ways of understanding the chemistry. The importance of hydrogen bonding to the physical performance of polyurethane elastomers is similar to the importance of hydrogen bonds in cellulose, which provides strength in trees and wood. We can only measure something if we can have something to compare it to, and when we do the comparison, we see the similarities and the differences.

What key experiences during your academic years—at King's College, Case Western Reserve University, or the University of Akron—most influenced your interest in polymers and structure-property relationships?

When I started my bachelor-level college studies, I entered as a biology major with the thought of perhaps becoming a physician. During my academic studies, which included mandatory chemistry and physics classes, I found that I enjoyed chemistry and physics as much as I enjoyed studying biology. I was also lucky to have some great undergraduate professors who made the science exciting and related the fundamental science to real-world applications. I appreciated this teaching perspective because it made the concepts I was studying real and not abstract. When it came time to declare my degree path, I realized that I wanted to focus on the fundamental science. I double-majored in Biology and Chemistry because I enjoyed them both. In both fields I realized that there was molecular order which had a specific function in the materials world and the biology world.

When I finished my bachelor studies, I took an industrial job at a company that made polymeric coverings for large rollers that were used in papermaking machines. This is where I was introduced to polyurethane chemistry. It was a small company, and I was forced to learn the fundamentals of PU chemistry on my own. It was here that I started to recognize that the type of flexible (or soft) domain and the amount and type of isocyanate used to make a polyurethane made a major difference in how the polyurethane polymer performed physically. I worked in industry for three years before I started my graduate studies.

I looked for a graduate program that would allow me to study polymer structure from an analytical perspective. I liked the idea of defining molecular structure and relating it to the physical performance of the polymers. I enrolled in graduate studies at Case Western Reserve University because the chemistry and polymer science departments collaborated and had some professors who held joint appointments in both departments. I chose to work for *Professor William Ritchey*, who specialized in solid-state nuclear magnetic resonance spectroscopy (SSNMR) and was a professor in both departments. Prof. Ritchey had worked in industry before becoming a professor at CWRU and thus had the academic and industrial background that matched my interests.



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Joseph Winczke
President
Professor, Nanyang Tech

SSNMR allows you to study polymers in their solid state — the state in which polyurethanes are used for specific applications. A simplistic description is that the technique allows you to observe specific parts of a polymer molecule and watch how the molecule moves and interacts with other portions of the polymer molecule. Defining the size and shape of a polymer molecule and understanding how the molecule moves and dissipates energy when it is perturbed by some physical force or stress is essential for defining the structure behind the physical property.

Professor Ritchey was a good friend of Professor Peter Rinaldi of the University of Akron (UA). Prof. Rinaldi was also a renowned NMR spectroscopist, and he also held joint appointments in Chemistry and Polymer Science at UA. When I left CWRU with my master's degree, I joined Prof. Rinaldi's group at UA to continue my SSNMR studies of polyurethanes and to also explore the use of computer molecular modeling. This was another important aspect of my structure-property evolution because the computer modeling allowed me to visually construct polyurethane models on the computer screen and study their shape and motion.

I was able to correlate this shape and motion of the models to the SSNMR data of the polyurethane polymers I was studying. The combination of these two techniques was the start of my lifelong interest in structure-property relationships, not just for polyurethanes but for all types of polymers.

Looking back, what motivated you to pursue a career in industrial chemistry rather than a purely academic path?

I thought about pursuing an academic career after graduate school because I love to teach. I was lucky to have some great teachers throughout my academic studies, and they inspired and motivated me to be a teacher. Having also come from an industrial experience prior to my graduate studies, I appreciated seeing how chemistry can be applied to industrial applications.

I chose to take an industrial job at ICI Polyurethanes (which later became Huntsman Polyurethanes) because I was able to directly use my graduate studies in polyurethane structure-property relationships in designing new polyurethane chemistries. While working in industry I never lost my desire to teach and found that I could have the best of both worlds by teaching as an adjunct professor at several schools.

Over time I also found that there was a need for industrial classes on polyurethane and polymer chemistry and their application to things like adhesion and composite materials. Developing and teaching industrial classes also allowed me to find alternative ways of indulging my love of teaching.

“Understanding polymer structure–property relationships shaped my entire career. Industry allowed me to apply this science while still fulfilling my passion for teaching.”

“SSNMR and molecular modeling opened my eyes to how polymer structure defines performance. That insight guided my path into industrial chemistry, where I could apply and teach what I love.”



Research Excellence & Scientific Contributions

Over the past four decades, polyurethane chemistry has undergone major transformations. What scientific breakthroughs do you consider the most impactful?

Like most innovation, I think polyurethane innovation is driven by finding the unique attributes of a given material which can then be applied to unique or specific applications. Polyurethane chemistry is used in many varied applications because it can be tailored to provide unique physical properties for specific applications. Unlike polyethylene, which is derived from ethylene monomer, there is no polyurethane monomer. Polyurethanes are derived from a variety of isocyanates and an even larger variety of polyol and other functional polymers to produce a variety of polymeric structures for a variety of applications.

Once a polyurethane is used in a given application, the chemistry can continue to evolve based on how the polyurethane performs in that application. A good example of this is flexible polyurethane foam. It was originally developed and used in the 1950s for insulation and has continued to evolve in its uses. Current slabstock and molded flexible foams can provide a variety of properties for many different applications. They are made by varying the PU chemistry to deliver a defined performance. I think the most impactful breakthrough is that formulators recognize that they can tailor polyurethane chemistry for their specific needs.

I also think that a lot of innovation comes from experience in using a polyurethane technology. An example of this is the evolution of blowing agents used in rigid foams. Because of their excellent insulating ability, rigid foam is used to provide energy efficiency in construction and appliances, and the rigid foam market has continued to grow. With that growth is the learning and understanding of the impact of the chemistry on the environment and society in general. This has led to the development of more efficient and environmentally benign blowing agents.

More recently, there is a large commitment in the PU industries toward more sustainable materials and recycling. Part of this is driven by government regulation and partly by societal and market demand. As long as there is a demand, there will be continued innovation in processing, in chemistry, and in the handling and use of polyurethanes.

You emphasize a structure-property perspective in your research and teaching. Why is this viewpoint so critical in designing next-generation polyurethane systems?

I emphasize polyurethane product development from a structure-property perspective because I believe it is the most efficient way to achieve the desired performance a formulator is looking for in a particular application. If you understand concepts like the symmetry of the isocyanate molecules and the influence the symmetry has on molecular packing and intermolecular interactions, it is easier to design your polyurethane.

An example of this is controlling the melting behavior of a thermoplastic polyurethane made with different diisocyanates. Another example is understanding the reactivity of the isocyanate used in a polyurethane adhesive based on its morphology (structure) and how that structure controls reactivity and molecular weight build-up for a given process and end-use application.



Among your 60+ peer-reviewed publications and 22 patents, which innovations stand out as milestones in your scientific journey—and why?

I will firstly state that the publications and patents are the result of collaborations with others. I am most proud of having worked with some great colleagues who, together with myself, helped expand the understanding of polyurethanes, adhesives, composites, and bio-based materials. The works that stand out to me are the publications that define something new which then led to an innovation. One example is early in my industrial career I, along with my colleagues, helped define the adhesion mechanism of isocyanate adhesives used as binders in wood composites. Understanding how an adhesive works makes it possible to then design chemistry that can work better and enhance performance. Simply stated, how can you develop a new polyurethane adhesive if you do not understand how the current PU adhesive works?

Another example is a recent publication in which we defined the performance and adhesion mechanism of a protein-based adhesive. Researching how the adhesive behaves during processing and describing the failure mechanism occurring in a specific application allowed us to explore and design some polyurethane additives to enhance crosslinking and physical performance. Again, I believe it is important to understand the chemistry and the physical behavior of a polyurethane in order to develop enhanced products.

As someone deeply involved in bio-based adhesives, coatings, and fiber composites, what emerging trends excite you the most in the sustainability landscape of polyurethane materials?

The thing that excites me most in bio-based materials is the magnitude of the effort being put forward in the polyurethane and other industries regarding sustainability and the use of bio-based raw materials. The challenges are large because replacing conventional PU raw materials will not be easy for a number of reasons which include supply and availability, logistics and processing related to handling and manufacturing, and finally cost.

It is also important to remember that new bio-based materials usually are not drop-in replacements for current petroleum-derived materials. It does not mean that they are not as good. It only means that you need to understand the chemistry and structure-property relationships to get the required performance. The large number of research groups working on bio-based materials will surely result in the use of these new materials in conventional and new applications.

The efforts have been going on for quite some time and are now getting much notice and publicity. It is important to remember that it will take time to fully understand and scale up many of these exciting chemistries.

“Sustainability in polyurethanes is accelerating because of the tremendous global effort behind bio-based chemistry. New materials aren’t drop-in replacements—but with the right structure-property understanding, they can redefine performance.”

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During your years at ICI/Huntsman Polyurethanes, what major R&D projects or technical areas did you work on, and which contributions do you feel had the most meaningful industry impact?

I worked for ICI/Huntsman for almost 9 years before I decided to start Polymer Synergies. During that time, I worked in the Wood-Adhesives group, but I also got involved with other groups working on diverse projects in rigid foam and elastomers. I also worked closely with my colleagues in central R&D located in Brussels, Belgium.

The beauty of polyurethane chemistry is that the raw materials are the same whether you are making an adhesive, flexible foam, rigid foam, or an elastomer. If you understand the chemistry from a structure-property perspective, you can design the polyurethanes to perform for a variety of applications. I enjoyed working across product lines to learn from my colleagues and to share my perspective with them.

My background in polyurethane and polymer characterization provided me the opportunity to get involved in problem solving and new product development across the polyurethane spectrum of applications.

Huntsman has a strong culture of technical excellence and innovation. How did this environment shape your scientific thinking, problem-solving approach, and understanding of polyurethane technology?

Yes, Huntsman did allow me the opportunity to work in an innovative environment. During my time there I was allowed to do the research necessary to develop an understanding of a product or a problem from a fundamental perspective. My supervisors at the time encouraged my research directions and my structure-property perspective, which led to positive collaborations with my R&D colleagues. Because of the freedom I experienced at Huntsman and the success I had with my projects, I continued to gain confidence in my structure-property approach to polyurethane R&D.

You worked closely with multidisciplinary teams—chemists, application engineers, business units, and customers. What key lessons did you learn about effective collaboration and cross-functional innovation?

Working with multidisciplinary teams is part of the fun of being an industrial scientist. Working with my colleagues in R&D, with application engineers, technical service representatives, sales and marketing colleagues, accounting and business associates, and with our customers was one of my greatest learning experiences.

When working on a new product development, a manufacturing issue, or a customer concern, I learned it was important to listen to everyone's perspective about the project or problem and not to discount information that may not seem relevant to the project or problem analysis. I learned that my colleagues and customers all have valuable insights and were passionate about their work and their contributions.

I also learned how much I did not know about how our products are made, how they are used in a variety of applications, and how they perform in a variety of applications. I learned that it is important to keep an open mind, to listen carefully and learn, and to celebrate success with others.



Were there any significant customer or partner collaborations during your Huntsman years that resulted in breakthrough polyurethane technologies or accelerated product development?

There were many significant collaborations with customers, with my Huntsman colleagues, and with my academic colleagues, with whom I engaged in my projects. The most memorable collaborations were the ones that allowed me/us to explore and understand the fundamental chemical and physical properties of our products.

I recall a specific example where a customer valued that we took the time to understand how our products worked in their application. It happened to be one of our largest customers that used one of our adhesives to expand their business. When there was a problem with one of their products, we were asked to help understand the problem.

I proposed an approach of gaining a fundamental understanding of the problem, which would take longer than a trial-and-error approach. The customer was very supportive of gaining a deeper understanding of their product and how our adhesive contributed to their product. The understanding we gained from our research helped the customer grow their product line substantially and used the data we collected to promote the quality of their product.

Huntsman's global presence exposed you to different markets and application needs. How did these international experiences influence your understanding of the diverse expectations within the polyurethane value chain?

Indeed, understanding that polyurethanes are used and thought of differently in different parts of the world was yet another important lesson I learned while working with Huntsman. I had the opportunity to work with colleagues around the globe. I learned that their customer needs were different from our customers in North America even if they were using the same product.

These differences were most apparent in the environments the products were used in. A manufacturing facility in Eastern Europe had different needs and operating conditions as compared to our North American customers. Our customers in China had needs and operating conditions that were different again from both North America and Eastern Europe. These differences spanned the range from material purchasing, material handling, worker training, safety requirements, and environmental regulations.

There are also differences in manufacturing equipment and environmental climates in which the product is used that need to be considered. Another very important difference that is essential to understand is the cultural differences in how people communicate and share information. Knowledge within an organization is shared differently in different parts of the world.

“Working globally taught me that the same polyurethane behaves differently in different markets. Success depends on understanding not just the chemistry—but the culture, climate, and conditions where it is used.”

TechnoBiz Training

Adhesion Science and Polyurethane

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What factors do you believe contributed most to the successful commercialization of new polyurethane technologies within a large corporation like Huntsman?

There are several things that I think are important. First is listening to the customer and their needs and problems. Without the customer, it is difficult to define what works best. It is also important to have a good team who understands both the technology and the customer's needs. That team needs to be able to communicate with the scientists and engineers in both companies (yours and the customer's). Another important factor to a successful commercialization is patience. A new product has unknowns, even when extensively tested in the laboratory and in pilot scale-up. It is important that this is understood by you and the customer.

Looking back, how pivotal was your Huntsman experience in preparing you for your later roles—as a consultant, educator, and founder of Polymer Synergies?

I learned a lot about how to communicate and how to work together efficiently with a diverse group of people, having a diverse set of specific skills, all of which are important to the culture and success of a company. The people are the company. I also learned a lot about how important the customer is to my success. I found that my love of teaching and being able to communicate difficult concepts in a way that makes people feel comfortable helps build relationships with colleagues and customers.

Polymer Synergies LLC – Vision, Services & Impact

You founded Polymer Synergies in 2000. What inspired you to launch a consulting and R&D service company at that point in your career?

When I finished my bachelor's degree and worked for the small company that made polymer coverings for paper machine rolls, I was new to polyurethane chemistry. We had some issues with some of our polyurethane products, but we could not get much technical help from the large polyurethane suppliers because we did not buy large quantities of polyurethane. That small company funded my graduate research because they saw value in understanding polyurethanes for their specific application. I studied polyurethanes in depth, and my doctoral thesis is titled "Structure-Property Relationships in Polyurethane Elastomers." That company's support and my years in a graduate school environment allowed me to recognize that there is a need for a place where small companies can go to get help with product development that is in between large industry and fundamental science academia. That is when the first idea for having my own company came to life. I even thought of the name Polymer Synergies when I was a graduate student at the University of Akron.

When I finished graduate school, I was excited to work in a large company and learn more about polyurethanes from a polyurethane manufacturing and supplier perspective. As I spoke of earlier, I enjoyed my time at ICI/Huntsman and learned a lot. In 1999 some friends of mine from that small company had started a new company and contacted me about helping them with a polyurethane project. I told them that I couldn't because of my current employment at Huntsman. They continued to ask for help and the idea for Polymer Synergies was reborn. It was coming up to the turn of the new century, and in the year 2000 I decided it was a good time to start Polymer Synergies.

"Successful commercialization begins with listening to the customer and ends with patience. Even the best technology needs time, teamwork, and clear communication to succeed."

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Polymer Synergies has supported clients for nearly 25 years. What are the core services your company provides today, and how have they evolved with the industry's needs?

My company provides contract R&D services to all size companies. I started PS with the idea of helping small to mid-size companies get the help they need with research and new product development. Over my 25 years, I have helped small, mid-size, large, and very large companies with their R&D needs. Polyurethane chemistry is a fundamental service we provide, but we have also helped companies with R&D for a variety of other polymeric materials including graft copolymers, inks, epoxies, emulsions, and bio-based polymers.

Adhesion science and adhesive development is another core service we provide. I work extensively with the wood and agricultural fiber composites industries because of their use of large quantities of isocyanate and polyurethane adhesives. Another service we provide, in conjunction with several universities that we have arrangements with, is polymer characterization services for adhesives and coatings.

Among your consulting assignments, what types of polyurethane, adhesion, or composite-related problems do companies most often struggle with?

I wouldn't say there is a most common problem that comes to us. Most of my clients have very unique needs or issues they are trying to resolve. We do a lot of evaluations of new chemistries brought to us by companies thinking these new chemistries may be of use in adhesives or composite materials, and they ask us to evaluate these new technologies to best define their attributes. Often, we find that the chemistry does not work the way they anticipated in a particular application. We help them understand the product's positive and negative attributes so they can decide how best to commercialize their new technology.

We also do a lot of work with bio-based materials for adhesives and polyurethanes. We have recently published a paper describing how soy-based adhesives work in wood composites. This fundamental understanding is the stepping stone to enhancing the performance of soy adhesives for use in broader applications.

Your client base spans North America, Europe, and Asia. What differences do you observe in technical challenges, expectations, or innovation priorities across regions?

I find that my clients in Asia are generally looking for help designing new products for a specific application, which may be in another part of the world. There is a big challenge conveying regulations and standards that need to be met, which differ in different parts of the world.

My European clients typically are looking for some consulting help to get them started on a project and to provide guidance as they do their own product development.

My North American clients are the most diverse in their requests and needs. I associate this with my company being regional to them and the ease of collaboration with these customers in their facilities or in my laboratory.

"Every client brings a unique challenge—there is no 'one problem' in this field. Our job is to reveal what the chemistry can and cannot do so companies can innovate confidently."



What do your clients value most about Polymer Synergies' approach—scientific depth, problem-solving speed, structure-property insights, or something else?

I have several companies that are return clients on multiple projects. They trust the rigor of the science and the efficiency with which I can work on a project. Many large companies cannot initiate and move on a project as quickly as my company can. An example of this is the ordering of chemicals for a series of experiments. Within many large organizations, the logistical requirements for purchasing, receiving, and cataloging chemicals can take a long time, sometimes weeks. I am able to order chemicals and start experimenting more rapidly.

Another thing that my clients value is that if there is any intellectual property that can be defined from a project, my agreements state that it belongs to them. When collaborating with other large companies or universities, my clients often find that there is often much debate and time spent discussing who owns the IP. That does not happen with my company.

When we work on a project, we are rigorous in our methods and use of statistics for analyzing data. Our clients appreciate the scientific rigor.

You have long-term clients who collaborate with you repeatedly. What do these enduring partnerships reveal about the value of external scientific expertise in the polyurethane ecosystem?

Besides the trust that has been gained by the quality of our scientific work and the ease of dealing with intellectual property, I have been told that the efficiency, speed, and cost of using external scientific resources like my company are very positive and cost-effective for the client. In addition, because I have experience working in multiple industries with many different types of chemistries, the broad expertise and different perspectives I am able to bring to a project are much different than the perspective from within the client company.

Polymer Synergies uniquely combines expertise in polyurethane chemistry, adhesion science, biopolymer adhesives, and fiber composites. What advantage does this multidisciplinary perspective provide when solving industrial problems?

Having worked with many different chemistries and composites, you learn from each project, and you can use that knowledge on new projects. The fundamentals of adhesion science are the same if you are making a wood composite for a house or a glass and carbon fiber composite for a wind turbine. Having a broad product development history definitely helps me to focus my research more quickly on new projects.

How do you integrate your expertise with a client's internal R&D, production, or quality teams to achieve successful outcomes?

I work closely with the client in defining the project and the milestones within the project. I often visit the client location to work in their laboratories or production facilities, and the client often comes and works with me in my laboratory. It is essential that both sides trust and learn from each other to achieve a successful outcome.

"External expertise brings efficiency, lower cost, and fresh perspective. Our broad experience lets clients see possibilities they might miss internally."



Looking ahead, how do you envision Polymer Synergies evolving to address emerging trends such as sustainability, bio-based materials, regulatory changes, and circular economy demands?

We currently do a lot of evaluation of new bio-based materials, and I believe that type of work will continue to grow. Almost every company now has a mission toward sustainability. Being able to evaluate new chemistry efficiently and cost-effectively is part of our mission and what we do for our clients.

Adhesion Science, Coatings & Applied Chemistry

Adhesion science is often misunderstood by non-specialists. What core principles should professionals truly understand to solve adhesion-related problems effectively?

Adhesion science is a multidisciplinary field of science. It involves the fundamental disciplines of chemistry, physics, surface science, rheology, mechanics, engineering and design, and material science. The chemistry of the adhesive and the surfaces being adhered needs to be compatible. An understanding of how the components being adhered will be processed is very important, because process and chemistry are related. An understanding of the use of the adhered component and the environment it will be used in is important. Energy dissipation within the adhesive and the substrate are also important factors necessary for achieving a durable adhesive bond.

Characterizing how an adhesive performs and what its adhesion mechanism is for a specific application is essential for designing new adhesives for that application. There are several well-accepted adhesion mechanisms which include chemical bonding, electronic and physical molecular attractions, and mechanical interlocking of components, as well as combinations of these mechanisms.

Adhesion science is challenging and fun!

Where do you foresee the next generation of breakthrough technologies in polyurethane adhesives, coatings, and surface treatments?

Polyurethane adhesives and coatings are generally considered together because of their common chemistry and manufacturing methods and because both adhesives and coatings require similar physical attributes like surface wetting and film formation. Coatings are generally used in industrial, architectural, and protective applications, and adhesives (and sealants) are generally used in construction, packaging, transportation, furniture, and footwear. For all these applications, there has been a general trend to move from solvent-based to water-based technologies in an attempt to reduce volatile organic chemicals (VOC) in the environment. As with polyurethane foams and elastomers, the growing use of sustainable, bio-based, or recycled materials will continue to evolve in coatings and adhesives also.

Another growing area for adhesives is polyurethane dispersions, which are used in automotive, footwear, lamination, and flexible packaging applications. They provide easy handling and low VOCs due to their water base.

“Effective adhesion is chemistry, physics, processing, and design working together. To solve adhesion problems, you must understand the mechanism—because a durable bond begins at the molecular level.”



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How can industries improve long-term durability and performance of adhesives under increasingly demanding environmental conditions?

Understanding the adhesion mechanism for a specific type of adhesive joint is important. Knowing how to build the molecular architecture using structure-property principles is also essential. Polyurethane adhesives are highly formulated and contain various additives and fillers to help with durability and environmental exposure. The use of nano-particle additives can help in elevating thermal stability and other physical property enhancements like strength and energy dissipation due to their large surface-to-volume ratio and intermolecular interactions within the polyurethane matrix.

Teaching, Short Courses & Knowledge Transfer

You have been a regular instructor at polyurethane expos organized by TechnoBiz and other global platforms. What motivates you to contribute so actively to these education programs?

I love to teach. It has always been a calling of mine. I have a certificate to teach Biology, Chemistry, and Physics at the secondary school level, which I obtained during my bachelor-level studies. While working at Huntsman, I was an adjunct faculty member at a local community college (Cumberland County College), and I currently teach online and in-person classes on Polyurethane Chemistry at The University of Akron.

While working at ICI/Huntsman I was asked if I could develop an introductory class on polyurethane chemistry for new employees. I also developed a class on isocyanate chemistry and adhesives to share with our wood composite customers to help them understand how the adhesives work and how to handle these adhesives.

The development of PU classes for industry, which I teach at companies and at PU and Adhesive expos, arose out of a need seen by myself and my clients to educate the workforce using polyurethanes. Helping people understand how to formulate and handle polyurethanes is essential for employee safety and company growth. I am happy to share what I have learned over my many years in the Polyurethane Industry with others.

Participants consistently describe your courses as highly practical and insightful. What types of reactions or feedback have been most meaningful to you?

I get great satisfaction from being able to help others understand the materials they are working with and how to manipulate those materials in formulations for their specific polyurethane products. While teaching, I can often see in a participant's face when a fundamental concept makes sense to them from a perspective they have seen in their own work.

I enjoy teaching in-person much more than online because it is easier to meet the needs of the participants by tailoring my presentation to their particular area of interest. In-person teaching also facilitates the asking of more questions by the participants, which helps me convey what is most important to them and helps me problem-solve directly with the participant.

"Long-term durability starts with understanding the adhesion mechanism and designing the right molecular architecture. Nanoparticles, additives, and smart structure-property choices allow polyurethane adhesives to withstand ever harsher environments."

Training Progra

d Polymers and Plastics

PU Tech Asia 2017

Polymer Synergies

Dr. Joseph Marcinko

INSRUCTOR

Has there been a memorable moment—a question, a discussion, or a participant's reaction—during a TechnoBiz PU course that highlighted the true impact of industrial education?

Yes, I remember talking to a participant in Bangkok who ran a small foam plant in Asia. One of my slides during the class showed how 1 part-by-weight (pbw) of water can consume 9.7 pbw of TDI or can consume 13.9 pbw of MDI. I could see that he was very interested in this information. He approached me after the class and told me that he was having trouble making consistent product in his plant. I asked him some questions about his polyol storage and handling. He stated that they did not take precaution with the polyol to keep moisture out.

I reminded him about the slide discussing adventitious water and the consumption of TDI and MDI. I could see that he immediately understood what might be causing the problem in his manufacturing plant. He was very appreciative of the information presented in class and of our discussion. I was happy I was able to provide useful information about his process.

You teach across a wide range of audiences, from chemists to engineers to business leaders. How do you tailor your teaching to such diverse groups?

Before starting any class, I try and get to know my audience by engaging each person and asking about their background, their specific job function, and the products they are manufacturing. If I am going into a company to teach, I try and find out the same type of information from the person who requested the training class. Knowing the participants' needs allows me to relate specific chemical concepts to what I have learned from them.

Based on your decades of training experience, what concepts or skills do PU professionals typically struggle with most—and why?

The one thing that stands out to me is that people do not always understand that you cannot separate chemistry from process, especially in a manufacturing facility. A change in processing conditions affects the chemistry of the polyurethane reaction. To emphasize this, I usually share data showing the making of a PU elastomer using a one-step method where the isocyanate, polyol, and chain extender are added together and mixed, versus a prepolymer method where the isocyanate and polyol are reacted first and then further reacted with a chain extender to make the elastomer.

I show the chemical and physical property differences measured and then discuss the molecular morphology differences that can occur due to the difference in processing of the same chemical composition. This is another example of why a structure-property perspective is important in PU chemistry.

“The biggest challenge is realizing you can't separate chemistry from process. Changing how you run the line changes the polymer you make.”



The Need for Professional Education in the PU Industry

Polyurethane technology is highly specialized. Why do you believe continuous professional education is essential for today's PU workforce?

Because PU technology is specialized and becoming further specialized by suppliers and formulators providing custom systems that reduce the need for formulating in the manufacturing facility, sometimes the fundamental chemistry concepts get lost. Automation and specialized system formulation can make manufacturing more efficient, but it can come at the cost of not knowing your product chemistry and your process chemistry. It is important for a manufacturer to understand the basics behind the products they make.

In addition, I believe and have seen that continuing education also leads to continuing innovation.

Many participants return for advanced courses year after year. What does this reveal about the evolving learning needs of polyurethane professionals?

I think polyurethane professionals understand the breath of polyurethane chemistry and technology and that it continues to evolve with new materials, regulations, and innovations. I believe most PU professionals understand that there is always something new to learn.

Sustainability & The Future of Polyurethanes

As sustainability becomes central to materials development, what realistic advances do you foresee in polyurethane chemistry over the next decade?

Sustainability has indeed become important in materials development. There continues to be much research into bio-based and recyclable materials, as well as research into non-phosgene routes to polyurethanes. The challenges with the implementation of new technologies relate to cost and infrastructure. These new technologies are competing with very efficient and established manufacturing for conventional polyurethanes.

In addition, some of the technologies require more chemical steps in the process that make large-scale manufacturing less attractive. Catalyst technology and innovation are also necessary for large-scale efficiency. New catalyst technology needs to evolve with new synthetic routes to polyurethane. Because of all these factors, it will take time for many of the new and sustainable materials to reach cost-effective commercialization.

Leadership, Values & Personal Philosophy

Across your career, what core values have guided your scientific, business, and teaching decisions?

Honesty, integrity, and discipline in your words and actions are important attributes required in science, business, and teaching. Listening and learning from colleagues, customers, and students are also necessary for success in whatever your endeavor may be. It is important to respect others and share success because everything each of us does relies on the knowledge and actions of others.

“PU professionals know the field is constantly evolving—new materials, new rules, new ideas. They return because there is always something new to learn.”



How do you remain scientifically curious and intellectually energized after more than 40 years in the field?

I find that the more I learn, the more there is to learn. I also enjoy learning and researching in new areas of study. This is how I got involved with bio-based polymers. I was asked if working on a bio-based project was something I could do and be interested in. I told the client that I did not have an extensive background in this area but was interested in learning more and believed my background, skills, and interest were enough to undertake the project. Their trust in me resulted in exploration into new and exciting chemistries.

Inspiration, Legacy & Advice

What continues to inspire you to teach, research, consult, and contribute to the global polyurethane community?

I sincerely enjoy what I do. Being a scientist and teacher is not a job for me it is who I am. I don't think about stopping or retiring. I enjoy the challenge of the science, and I enjoy the interaction with people.

What legacy do you hope to leave for the next generation of polymer and polyurethane innovators?

I hope that I have and can continue to share information that people find useful and that they will share their knowledge so that we can all contribute positively to society and our environment.



Made in EUROPE



RETICULATION.DE



HIGH TECH

- battery foam like nickel or copper foam
- ceramic filter for metals
- electrodes
- flame arrestors
- heat exchanger



MEDICAL CARE

- Foam swabs for probing
- Dialysis Bloodfilter
- HME-Filters, ECMO-lung, oxygenator
- Negative wound therapy promotes wound healing
- Hydrophilic foam for wound care provides cushioning effect



HORTICULTURE FARMING

- Soilless growing
- Water saving
- vertical and industrial farming



MATTRESSES & OUTDOOR FURNITURE

- Improved air flow
- regulates body temperature
- pressure relief
- antimicrobial
- water resistant
- quick drying



COMFORT FOAM

- The open cell structure facilitates air circulation, making it excellent for sports apparel where breathability is key
- Moisture transportation and quick drying
- Comfort and cushioning
- lightweight, ideal for running shoes, backpacks and human health



HYDRO SPONGES

- Extremely absorbent
- Low swelling
- High fluent retention

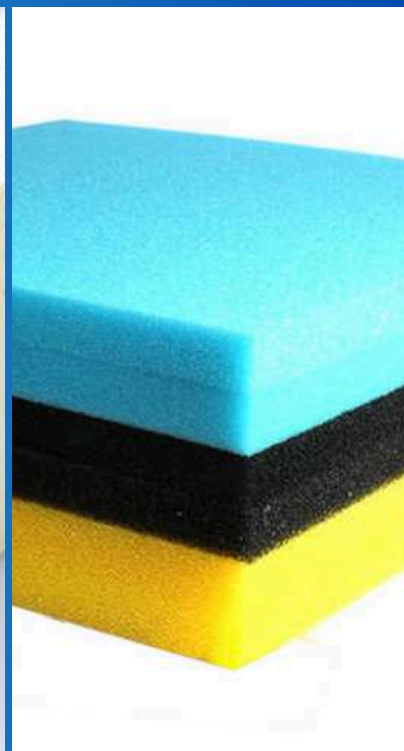


TechnoBiz

PU WEEK

***30 Mar-2 Apr 2026
Kuala Lumpur, Malaysia***

***A TechnoBiz Executive Forum
on Polyurethane Technology and Industry***



<https://www.technobiz.org>





A TechnoBiz Executive Forum on Polyurethane Technology and Industry

***30 Mar-2 Apr 2026
Kuala Lumpur, Malaysia***

TechnoBiz PU Week & Its Objectives

TechnoBiz PU Week 2026 is a comprehensive executive forum dedicated to advancing polyurethane technology, business development, and industry collaboration, taking place from 30 March to 2 April 2026 in Kuala Lumpur, Malaysia. Designed to address the needs of all stakeholders across the polyurethane value chain—including raw material suppliers, manufacturers, formulators, converters, researchers, machinery providers, service companies, and end-user industries—its purpose is to create a unified platform for learning, networking, and strategic engagement. With a strong focus on the Asian polyurethane industry, PU Week 2026 brings together regional and global leaders to explore innovations, market trends, sustainability pathways, and emerging opportunities shaping the future of polyurethane in Asia.

Key Components of TechnoBiz PU Week 2026

- **Asia Polyurethane & Adhesive Expo 2026** | A major regional exhibition bringing together polyurethane raw material suppliers, machinery manufacturers, system houses, technology providers, and service companies. | 30-31 March 2026, Putra World Centre, Kuala Lumpur
- **APBA Annual Conference 2026** | A free-to-attend industry conference organized by the Asian Polyurethane Business Association (APBA), featuring expert presentations, market insights, and panel discussions. | 30-31 March 2026, Putra World Centre, Kuala Lumpur
- **Sustainable PU Industry Forum 2026** | An international conference focused on polyurethane recycling, circular economy models, green chemistry, and sustainability innovations. | 1 April 2026, Seri Pacific Hotel, Kuala Lumpur
- **Polyurethane Training Courses** | Specialized technical courses covering PU chemistry, rigid foams, adhesives, PIR products, fire resistance, foam yield optimization, safety, and marketing/branding. | 1 April 2026, Seri Pacific Hotel, Kuala Lumpur
- **Polyurethane Executive Dinner** | An exclusive networking dinner for senior management and decision-makers from the global PU industry. | 30 March 2026, Seri Pacific Hotel, Kuala Lumpur
- **Polyurethane Research Fair** | A platform for students, researchers, and innovators to showcase scientific posters and engage with industry experts. | 30-31 March 2026, Putra World Centre
- **TechnoBiz Knowledge Test on Polyurethane Technology** | A professional assessment program designed to evaluate technical competence across PU chemistry, materials, processing, sustainability, and innovations. | 30-31 March 2026, Putra World Centre
- **Polyurethane Business Review (Media Partner)** | Weekly e-magazine coverage, industry news, interviews, and promotional visibility for participants and sponsors. | Free Subscription
- **Free Polyurethane Handbook (E-Book) Set** | All participants will receive a complimentary 5-Book Polyurethane Handbook E-Set, covering PU chemistry, foams, CASE applications, sustainability, and a complete Polyurethane Dictionary.

Event Venue

- Putra World Trade Centre, Kuala Lumpur, Malaysia
- Seri Pacific Hotel, Kuala Lumpur, Malaysia

Event Organizer : TechnoBiz

Event Partners: Asia Polyurethane Business Association (APBA) | HTC Global Co., Ltd.



A TechnoBiz Executive Forum on Polyurethane Technology and Industry

***30 Mar-2 Apr 2026
Kuala Lumpur, Malaysia***

Host City: Kuala Lumpur

Kuala Lumpur is one of the most connected cities in Southeast Asia, making it an ideal host for TechnoBiz PU Week 2026. With world-class airports, excellent regional and global flight links, and efficient city infrastructure, Kuala Lumpur offers seamless accessibility for delegates from across Asia and beyond. Its modern facilities, diverse accommodation options, and vibrant business environment create a highly convenient and welcoming setting for international conferences. As a dynamic hub for industry, trade, and innovation, Kuala Lumpur perfectly complements the spirit and scale of PU Week 2026.

Who Should Participate in PU Week 2026

PU Week 2026 is designed for all professionals, organizations, and stakeholders involved in the polyurethane value chain. Participation is highly beneficial for:

- Raw Material Suppliers (polyols, isocyanates, additives, catalysts, auxiliaries)
- Polyurethane System Houses & Formulators
- Foam Manufacturers (flexible, rigid, integral skin, spray foam)
- Adhesive, Sealant & Coating Producers (CASE)
- PU Elastomer, Composite & Specialty Product Manufacturers
- Machinery, Equipment & Tooling Companies
- Automation, Testing, Process Control & QA Providers
- R&D Professionals, Scientists & University Researchers
- Technical & Production Managers
- Business Development, Marketing & Product Management Teams
- Consultants, Service Providers & Technology Developers
- Purchasing, Sourcing & Supply Chain Professionals
- Industry Associations, Government Agencies & Policy Stakeholders
- Students, Young Researchers & Innovators interested in PU technologies

Organizer

TechnoBiz is a leading international organizer of professional events, training programs, and publications for the global polymer and polyurethane industries. With extensive experience in hosting specialized conferences and exhibitions across Asia, TechnoBiz is committed to promoting industry knowledge, networking, and business growth. As the organizer of PU Week 2026, TechnoBiz brings trusted expertise and a strong network to deliver a high-quality, impactful event for the polyurethane community.



TechnoBiz
PU
WEEK

*A TechnoBiz Executive Forum
on Polyurethane Technology
and Industry*

30 Mar-2 Apr 2026
Kuala Lumpur
Malaysia

<https://expo.technobiz.org>

ASIA
POLYURETHANE
& ADHESIVE EXPO

30-31 March 2026
Kuala Lumpur
Malaysia

World Trade Centre
10am-6pm

APBA
CONFERENCE

30-31 March 2026
Kuala Lumpur, Malaysia
World Trade Centre, 10am-6pm

Sustainable
PU Industry
FORUM

1 April 2026
Kuala Lumpur, Malaysia
Seri Pacific Hotel | 9am-5pm

Polyurethane
Executive
Dinner

30 March 2026
Kuala Lumpur, Malaysia
Seri Pacific Hotel, 7pm-10pm

Polyurethane
Research Fair

30-31 Mar 2026
Kuala Lumpur
World Trade Centre

POLYURETHANE
TRAINING

1-2 April 2026
Kuala Lumpur
Seri Pacific Hotel

TechnoBiz
KNOWLEDGE
TEST

Polyurethane
Technology
30-31 March 2026
Kuala Lumpur, Malaysia

PUReview

*A Weekly E-Magazine for
Polyurethane Business*

<https://www.technobiz.org>

ASIA POLYURETHANE & ADHESIVE **EXPO**

30-31 March 2026
Kuala Lumpur
Malaysia

World Trade Centre
10am-6pm

Exhibitor Profile -

POLYURETHANE : Polyols / Isocyanates / Additives | Auxiliary Chemicals | Polyurethane Systems | Mixing / Dispensing Units | Molds, Machinery & Handling | Casting & Molding Technology | PU Footwear Technology | Polyurethane Composites | PU Adhesives Technology | Laboratory and Testing Equipment | Automation & Control | PU Products | Foam Raw Materials & Chemicals | Foam Manufacturing Equipment | Foam Products | Testing Instruments | Mattress Machinery & Equipment | Mattress Materials | Research & Development, Consulting

ADHESIVE & COATING : Chemicals & Raw Materials: Resins, Rubber, Polyols, Binders, Primer etc | Equipment & Instruments: Mixing, Dispensing, Filling, Dosing etc | Adhesives & Sealant Products : Pressure Sensitive Adhesive, Polyurethane, Hot Melt | Epoxy, Emulsion, Silicone, Rubber, Latex, Engineering Adhesives and Sealants | Coating Technology: Automotive Coatings, Protective Coatings, Marine Coatings, Industrial Coatings | Bonding Technology

Booth Tariffs.

Standard Shell Scheme

- 9 SQM Booth (Inline) : 4500 US\$
- 9 SQM Booth (Corner) : 4800 US\$
- 18 SQM Booth (Inline) : 9000 US\$
- 18 SQM Booth (Corner) : 9500 US\$

Raw Space

- 18 SQM Space : 9,500 US\$
- 36 SQM Space : 15,000 US\$



Booth Booking Form



Remarks: Only approved contractors can build custom booths. Custom Booth Construction Period: 29 Mar 2026 (10am-8pm) ' **APBA Member Discount:** APBA Members receive a 10% discount on booth costs. Please get in touch with APBA for further information.

Additional Benefits for Exhibitors

- 1-Year Advertising Package in the Weekly E-Magazine "Polyurethane Business Review"
- Presentation Opportunity in the Conference Programs at the Expo
- Social Media Publicity via "TechnoBiz PU Network" and "APBA" LinkedIn
- Presentation Opportunity Via "TechnoBiz PU Tech-Talk"

Expo Timings

30 March 2026: 10am - 6pm
31 March 2026 : 10am -5pm

Venue:

Putra World Trade Centre Kuala Lumpur

Nearest Train Station: PWTC

Visitor Profile & Registration

All polyurethane industry professionals are welcome to visit the exhibition. Entry to the Asia Polyurethane & Adhesive Expo is free for all pre-registered visitors, providing open access to exhibitors, product displays, and networking opportunities.

Visitor Registration Form



Booth Enquiry : Peram Prasada Rao (Email: peram.technobiz@gmail.com | WhatsApp: +66-89-489 0525)

<https://www.technobiz.org>

ASIA POLYURETHANE & ADHESIVE **EXPO**

30-31 March 2026
Kuala Lumpur
Malaysia

World Trade Centre
10am-6pm

Confirmed Exhibitors

- Growchem Sdn. Bhd
- B-FACTL Co., Ltd.
- Changhua Chemical
- Dongguan Fung Billion Furniture Material Co., Ltd.
- Dongguan U-Long Machinery Co., Ltd.
- Elegance Industry
- ESUN International
- Hengguang New Materials
- Junchi Materials
- Maysta Chemical
- Ningbo Xinliang Machinery Co., Ltd.
- OSiC Performance Materials
- Polywin Chemical Shanghai Ltd
- Shanghai Bicheng Chemical Trade Co., Ltd
- Shanghai Chic New Material Co., Ltd.
- Shanghai Hecheng Polymer Technology
- Shijiazhuang Mingxu
- Suzhou Xiangyuan New Materials Co., Ltd.
- TU materials
- Cannon Fareast
- Polygreen Chemicals
- PT Sutindo Chemical Indonesia
- Pacific Thai Urethanes
- Elite Core Foam Machinery
- PCG PCC OXYALKYLATES SDN. BHD.
- Eastsun New Material (Zuhui) Co., Ltd.
- Xiamen Kaiping Chemical Co.,Ltd
- Shanghai Kaqin Chemical Science & Technology
- Zhejiang Lingxin Machinery Co.,Ltd.
- Mayrun
- Oster
- Yarong
- Guangzhou Yifan Chemical Co., Ltd.
- Xuchuan Chemical
- Jiangsu SD Technology Co., Ltd
- Shengduan (Yangzhou) Import & Export
- Asian Polyurethane Business Association
- HTC Global
- ISC Srl Italy
- ISOPA



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<https://www.technobiz.org>

ASIA POLYURETHANE & ADHESIVE **EXPO**

30-31 March 2026
Kuala Lumpur
Malaysia

World Trade Centre
10am-6pm



Booth Enquiry : Peram Prasada Rao (Email: peram.technobiz@gmail.com | WhatsApp: +66-89-489 0525)

<https://www.technobiz.org>

APBA CONFERENCE

**3rd Annual Conference
of Asian Polyurethane Business Association**
30-31 March 2026, Kuala Lumpur, Malaysia
World Trade Centre | 10:30am-4pm
Co-Located Event of **TechnoBiz PU Week 2026**

The ABPA Conference is an annual flagship event organized by the Asian Polyurethane Business Association and proudly co-located with TechnoBiz PU Week 2026. Designed to support industry-wide knowledge sharing, this conference is free for all polyurethane professionals to attend. It provides a valuable platform for discussing emerging technologies, market developments, sustainability trends, and practical solutions relevant to the PU industry. Bringing together experts, manufacturers, researchers, and business leaders, the ABPA Conference continues to strengthen collaboration and inspire innovation across the Asian polyurethane community.

Featured Speakers



Bart ten Brink



Dr. Joseph Marcinko



Daniel Turkovic



Tony Hatzikiriakos



Ryan Huang



Jayant Khadilkar



Dr. Fathilah binti Ali



Nikhil Vallabhan



Colin Groom



Sethu Raaj



Omprakash Bhingardev



Stefan Hermes



Jose Junior Naraval



Jörg Palmersheim



Leo Yang

Delegate Registration (FREE) : All polyurethane industry professionals are invited to join the APBA Conference at the Asia Polyurethane & Adhesive Expo 2026, taking place on 30-31 March 2026 in Kuala Lumpur, Malaysia. Entry is free for all pre-registered participants of the Expo. Please register through the provided QR link to receive your entry badge and secure your participation.



Venue: Putra World Trade Centre, Kuala Lumpur

<https://www.technobiz.org>

APBA CONFERENCE

**3rd Annual Conference
of Asian Polyurethane Business Association**
30-31 March 2026, Kuala Lumpur, Malaysia
Putra World Trade Centre | 10:30am-4pm
Co-Located Event of **TechnoBiz PU Week 2026**

Keynote Presentation

Polyurethane Industry Outlook: Europe's Current Landscape and the Global Shift in Trends Ahead
Bart ten Brink, President Europur, European Association of Flexible Polyurethane Foam Blocks Industry

Panel Discussions

- Emerging Applications & Market Positioning: PU in Asia's Growth Sectors
- Flexible Foam in Furniture & Bedding: Competing on Comfort, Branding, and Certification
- Automotive Seat Foams: Marketing to a Transforming Mobility Industry

Invited Talks

- **VOC Control in PU Manufacturing: Innovations, Impact & Future Pathways in Asia** | Omprakash Bhingardev, Director Program, Launch & Change office, Adient, India
- **Biobased Polyurethanes: Driving Sustainable Innovation in Modern Adhesives** | Sethu Raaj, Founder |CEO, Midwest Composites, Malaysia
- **MDI-Based Prepolymers in Adhesive Applications** | Colin Groom, Founder |Managing Director, Pacific Thai Urethanes, Thailand
- **PU Landscape Overview in APAC** | Nikhil Vallabhan, Director Chemicals, Materials & Nutrition, Frost & Sullivan, Malaysia
- **Synthesis of Bio-based Polyurethane using Microwave Synthesizer and their Potential Applications** | Dr. Fathilah binti Ali, Associate Professor, International Islamic University Malaysia (IIUM)
- **Opportunities in Polyurethanes as industrial perspective** | Jayant Khadilkar, Owner & Managing Director, Jay Elastomers
- **New Development of Low-Odor/VOC Amines for PU Applications** | Ryan Huang, Deputy General Manager, Technical Sales, Hengguang (Jiangsu) New Materials, China
- **Applications of Cast Polyurethane Elastomers (CPU)** | Daniel Turkovic, Global Technical Service Manager, Era Polymers Pty Ltd, Australia
- **Chemistry of Bio-Based Polyurethanes** | Dr. Joseph J. Marcinko, President & Principal Scientist, Polymer Synergies, USA
- **The IKEA Way: Developing Circular Foams, One Cushion at a time** | Jose Jr. Naraval, Material and Technology Engineer for Foams, Inter IKEA Group
- **Training at Scale: Enabling Safe Diisocyanate Handling Worldwide** | Joerg Palmersheim, Secretary-General, ISOPA/ALIPA
- **Industrial Intelligence in the Polyurethane Industry** | Stefan Hermes, Chairman / Managing Director, APBA / HTC Global

Call for Speakers / Presentations : Please contact Stefan Hermes, Chairman, Asia Polyurethane Business Association (APBA) (Email: stefan.hermes@htcglobal.asia) with presentation proposal and short biography.

Delegate Registration (FREE) : All polyurethane industry professionals are invited to join the APBA Conference at the Asia Polyurethane & Adhesive Expo 2026, taking place on 30-31 March 2026 in Kuala Lumpur, Malaysia. Entry is free for all pre-registered participants of the Expo. Please register through the provided QR link to receive your entry badge and secure your participation.



Venue: World Trade Centre, Kuala Lumpur

<https://www.technobiz.org>

Sustainable PU Industry FORUM

International Conference on Polyurethane Recycling & Sustainability

1 April 2026, Kuala Lumpur, Malaysia
Venue: Seri Pacific Hotel

TechnoBiz, in partnership with HTC Global, is organizing a 1-day International Conference – “Sustainable PU Industry Forum 2026”, focusing on the latest developments, technologies, and market trends in polyurethane recycling and sustainability. This forum will gather global experts, innovators, and business leaders to discuss circular economy models, sustainable raw materials, life cycle assessments, and green manufacturing solutions. It will also explore evolving market dynamics, policy frameworks, and investment opportunities driving sustainability across the polyurethane value chain. The event aims to inspire collaboration and highlight emerging innovations shaping the future of a greener, more circular PU industry.

Conference Focus

- Circular Economy in the PU Industry
- Polyurethane Recycling Technologies (Chemical & Mechanical)
- Sustainable Raw Materials & Green Chemistry
- Life Cycle Assessment & Environmental Impact
- Waste Management & End-of-Life Solutions
- Design for Sustainability & Recyclability
- Energy Efficiency in PU Manufacturing
- Additive and Catalyst Innovations for Eco-Friendly Systems
- Industrial Case Studies & Collaborative Value Chains
- Policy, Standards & Market Development for Recycled PU
- Digitalization & Smart Process Monitoring for Sustainability
- Future Innovations & Net-Zero Roadmap for the PU Industry

Call for Papers / Speakers

Interested researchers, industry professionals, and innovators are invited to submit presentation proposals (abstract ~300 words) for the Sustainable PU Industry Forum 2026 covering polyurethane recycling technologies, circular economy models, sustainable raw materials, LCA, green chemistry, digitalization, and market trends. Submit by 20 December 2025 to stefan.hermes@htcglobal.asia. Selected papers will be included in the conference program and TechnoBiz Conference Proceedings. Please note that speakers are responsible for their own travel and accommodation.

Registration Fee:

- 500 US\$/Person (In-Person Participation)

Registration fee includes lunch and refreshments during the program.

- 750 US\$/Person (Online Participation)

Remarks: Group Discount applies for a group of 3 or more from same organization. Taxes apply on above registration fees.

Keynote Speaker



Polyurethane Recycling: *Current Realities and Future Potential Pathways*

Bart ten Brink

President Europur
*European Association of Flexible
Polyurethane Foam Blocks
Industry*

Delegate Registration



Conference Chairman : Stefan Hermes, Chairman, Asian Polyurethane Business Association (APBA)
Email: stefan.hermes@htcglobal.asia | Tel/WhatsApp: +66-63 249 9888 Web: www.apba.online

<https://www.technobiz.org>

POLYURETHANE TRAINING

**Short Training Courses
for PU Industry Professionals**
1-2 April 2026, Kuala Lumpur, Malaysia
Venue: Seri Pacific Hotel

As part of TechnoBiz PU Week 2026, a series of specialized professional short training courses will be organized on 1-2 April 2026 in Kuala Lumpur, Malaysia. These courses are designed for professionals working in the polyurethane industry, offering in-depth learning on polyurethane chemistry, raw materials, processing, adhesives, foams, and fire resistance. Each course will be conducted by renowned international experts with extensive industrial and academic experience, providing participants with valuable technical insights and practical knowledge to enhance their professional expertise.

Course Schedules & Topics

Polyurethane Chemistry

1 April 2026 | 9am -5pm | Speaker: Dr. Joseph Marcinko
Registration Fee: 300 US\$/Person

Rigid Polyurethanes - Chemistry, Raw Materials and Processing

1 April 2026 | 9am-12pm | Speaker: Dr. Grazyna Mitchener
Registration Fee: 200 US\$/Person

Improving Fire Resistance of Rigid Polyurethanes

1 April 2026 | 2pm-5pm | Speaker: Dr. Grazyna Mitchener
Registration Fee: 200 US\$/Person

Chemistry and Manufacturing of Polyisocyanurate (PIR) products.

2 April 2026 | 9am-12pm | Speaker: Dr. Grazyna Mitchener
Registration Fee: 200 US\$/Person

Polyurethane Adhesives

2 April 2026 | 9am -5pm | Speaker: Dr. Joseph Marcinko
Registration Fee: 300 US\$/Person

Flexible PU Foam Plant Yield Optimization & Theory of Constraints

2 April 2026 | 9am -12pm | Speaker: Stefan Hermes
Registration Fee: 300 US\$/Person

Marketing and Branding for the Polyurethane Industry

2 April 2026 | 2pm-5pm | Speaker: Peram Prasada Rao
Registration Fee: 200 US\$/Person

Polyurethane Industry Safety

2 April 2026 | 2pm-5pm | Speakers : Jörg Palmersheim , Stefan Hermes
Registration Fee: 200 US\$/Person

Delegate Registration



Speakers



Dr. Joseph Marcinko



Dr. Grazyna Mitchener



Stefan Hermes



Peram Prasada Rao



Jörg Palmersheim

Program Manager : Sirinthip Boonlom, TechnoBiz | Line: @technobiz
Email: sirinthip.technobi@gmail.com | Tel/WhatsApp: +66-81-988 6874 | +66-84-658 1444

<https://www.technobiz.org>

Polyurethane Executive Dinner

Kuala Lumpur, Malaysia
Seri Pacific Hotel
30 March 2026 (7pm-10pm)

The Polyurethane Executive Dinner is an exclusive networking evening reserved for top management—both technical and non-technical—from across the global polyurethane industry. Held during TechnoBiz PU Week 2026, this special gathering provides a relaxed and elegant setting for senior leaders to connect, exchange strategic perspectives, and explore collaboration opportunities. Bringing together executives from raw material suppliers, manufacturers, technology providers, and industry associations, the dinner fosters high-level dialogue on the trends and future directions shaping the PU sector.

Delegate Registration



Registration Fee: 150 US\$/Person

Polyurethane Research Fair

30-31 Mar 2026
Kuala Lumpur, Malaysia
Putra World Trade Centre

The Polyurethane Research Fair is a dedicated platform for students, researchers, and young professionals to showcase their latest scientific and technical work in polyurethane chemistry, materials, processing, and applications. Organized as part of TechnoBiz PU Week 2026, this fair aims to promote knowledge exchange, encourage innovation, and connect emerging researchers with industry experts. It provides an excellent opportunity to present new ideas, gain feedback, and build valuable professional networks within the PU community.

Who Can Participate

Participation is open to all Master's and PhD students, early-career researchers, university faculty, and R&D professionals working on polyurethane-related topics. Industry researchers and independent innovators are also welcome to submit their work.

Poster Specifications

Poster Size: 95 cm (Width) × 120 cm (Height)

Additional Information

- Complimentary poster printing service will be provided by the organizers.
- Each participant may submit a maximum of two poster topics for consideration.

How to Participate (Call for Posters / Researchers)

To participate in this fair, please submit a poster proposal including: Poster title, Short summary of the work, Presenter biography and Portrait picture. Please email your proposal to peram.technobiz@gmail.com before 10 January 2026. Approved posters must be submitted in high-resolution PDF format by 15 February 2026.

Program Manager : Sirinthip Boonlom, TechnoBiz | Line: @technobiz
Email: sirinthip.technobi@gmail.com | Tel/WhatsApp: +66-81-988 6874 | +66-84-658 1444

<https://www.technobiz.org>



Polyurethane Technology

30-31 March 2026, Kuala Lumpur, Malaysia
World Trade Centre

The TechnoBiz Knowledge Test on Polyurethane Technology is a professional assessment program designed to evaluate the applied knowledge and technical skills of individuals involved in polyurethane production, R&D, and applications. It covers key areas including PU chemistry, raw materials, foam and CASE systems, processing technologies, sustainability, and innovations. Participants can assess their competency and earn a TechnoBiz Knowledge Test Certificate, recognized as a mark of technical excellence in the global PU industry.

This test will be conducted as part of TechnoBiz PU Week 2026, to be held in Kuala Lumpur, Malaysia. Free registration – all interested participants are welcome to join.

Test Details:

- Dates: 30–31 March 2026
- Venue: Putra World Trade Centre, Kuala Lumpur
- Total Duration: 4 hours (8 parts × 30 minutes each)
- Format: Multiple Choice & True/False Questions
- Mode: Onsite participation only (physical presence required)

 **Winner Reward:** The top scorer will receive a US\$ 500 cash prize and a Certificate of Excellence, honoring outstanding performance and deep understanding of polyurethane technology.

Test Schedule

30 March 2026 – Fundamentals & Core Applications

- 11:00 – 11:30 | Part 1: Fundamentals of Polyurethane Chemistry
- 13:00 – 13:30 | Part 2: Raw Materials and Additives
- 14:00 – 14:30 | Part 3: PU Foam Systems and Processing
- 15:00 – 15:30 | Part 4: PU Coatings and Surface Technologies

31 March 2026 – Advanced Topics & Future Directions

- 11:00 – 11:30 | Part 5: PU Adhesives, Sealants & Elastomers (CASE)
- 13:00 – 13:30 | Part 6: PU Processing & Troubleshooting
- 14:00 – 14:30 | Part 7: Sustainable PU Technologies & Recycling
- 15:00 – 15:30 | Part 8: Advanced & Emerging PU Innovations

Pre-Registration: Interested participants must pre-register by emailing peram.technobiz@gmail.com (please include your name, organization, role, and contact number).

Who Should Participate: Professionals, researchers, and students involved in polyurethane production, formulation, processing, and applications — including engineers, chemists, R&D staff, and quality or technical managers.





Membership Form



PUReview

The Asian Polyurethane Business Association (APBA) is a dedicated platform established to connect, support, and advance the polyurethane industry across Asia. Its core objective is to foster collaboration among manufacturers, suppliers, researchers, and business leaders while promoting knowledge exchange, industry standards, and sustainable growth. APBA offers two life-membership options—Corporate Member (1,000 USD) and Professional Member (500 USD)—each requiring a one-time payment. These memberships remain valid for the entire duration of APBA's existence. The membership program officially begins in January 2026. More information is available at www.apba.online. For more information, please contact *Stefan Hermes*, Chairman, APBA (Email: stefan.hermes@htcglobal.asia)

PU Review is a weekly e-magazine published by TechnoBiz, dedicated to keeping polyurethane industry professionals informed, connected, and inspired. Each issue features insightful cover story interviews with global experts, up-to-date business news, and practical technical articles covering materials, processes, markets, and innovations. The magazine also offers valuable advertising opportunities for companies at a fixed annual fee of 1,000 USD or onetime fee of 3000 USD for life, with APBA members enjoying a 35% discount. For advertising and editorial inquiries, please contact *Peram Prasada Rao* at peram.technobiz@gmail.com.

Sponsorship Package - TechnoBiz PU Week 2026

Main Sponsor : USD 25,000

- Official recognition as "Main Sponsor of TechnoBiz PU Week 2026."
- Prominent logo display on all event publicity materials
- Complimentary 36 sqm booth (raw space) at the Asia Polyurethane & Adhesive Expo 2026.
- Five complimentary delegate passes for all PU Week events.
- 1-Year Advertisement Package in "PU Review" Magazine
- Cover Story Interview in the Selected Issue of "PU Review" Magazine
- Option to display corporate video or promotional banners at main venues.
- Publicity via "TechnoBiz Polyurethane Network" LinkedIn Page
- Publicity via "APBA" LinkedIn Page
- Recognition in all press releases and digital promotions.

Corporate Sponsor – USD 15,000

- Recognition as "Corporate Sponsor of TechnoBiz PU Week 2026."
- logo display on all event publicity materials
- Complimentary 18 sqm booth at the Asia Polyurethane & Adhesive Expo 2026.
- Three complimentary delegate passes for conference and training sessions.
- Acknowledgment during opening and closing sessions.
- 1-Year Advertisement Package in "PU Review" Magazine
- Cover Story Interview in the Selected Issue of "Polyurethane Business Review" Magazine

Supporter – USD 10,000

- Recognition as "Supporter of TechnoBiz PU Week 2026."
- logo display on all event publicity materials
- Complimentary 9 sqm booth at the Asia Polyurethane & Adhesive Expo 2026.
- One complimentary delegate pass for conference and training.

Program Manager : Sirinthip Boonlom, TechnoBiz | Line: @technobiz
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<https://www.technobiz.org>

TechnoBiz
PU
WEEK

30 March 2026 - 2 April 2026
Kuala Lumpur, Malaysia

Free 5-Books !!
PU Handbook Set
for every PU Week 2026
participant.

*Every participant of TechnoBiz
PU Week 2026 will receive the
Polyurethane Handbook E-Book Set
(5 titles), covering chemistry, foams,
CASE, sustainability, and a
complete Polyurethane Dictionary.*

Key Project Team

Peram Prasada Rao
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WhatsApp: +66-89-489 0525

Stefan Hermes
Chairman, APBA
Email: Stefan.hermes@htcglobal.asia
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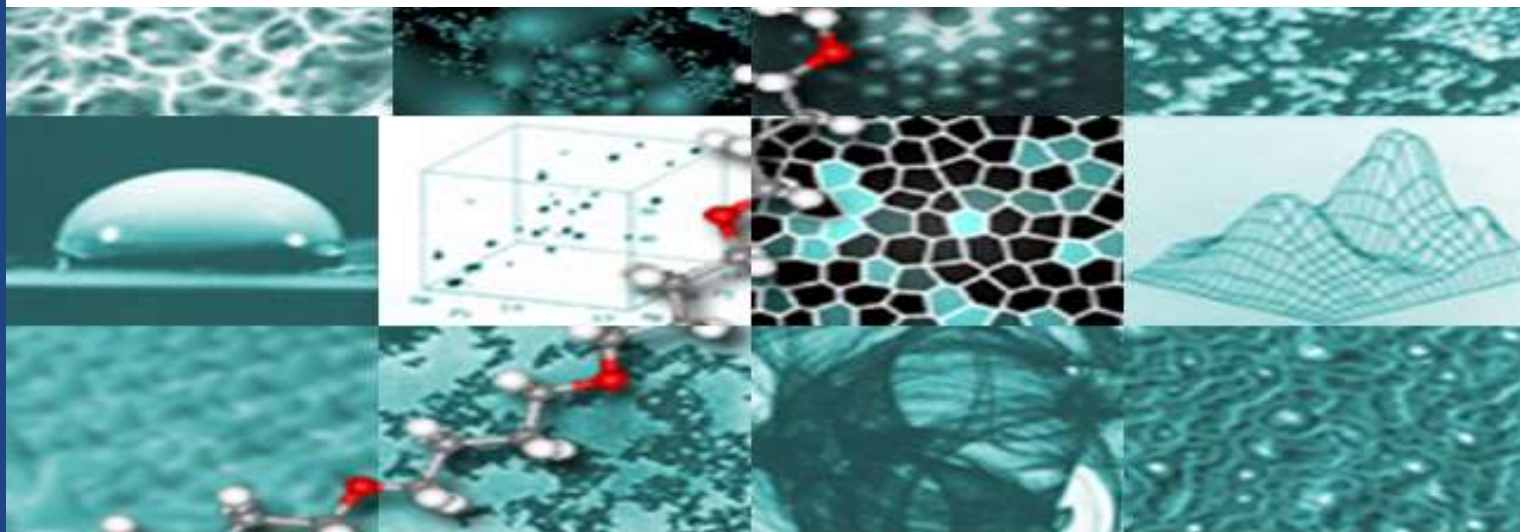
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Polyurethane Consultants Spotlight

PUReview

Polymer Synergies, LLC

Architects of Molecular Innovation®



Polymer Synergies was founded in the year 2000 and is a unique provider of new technologies, consulting services, technical training, and contract R&D services specializing in: Polyurethane Chemistry, Adhesion Science, and Bio-Based Polymers and Composites

We develop and design polyurethane systems from a molecular, Structure/Property, perspective to ensure that performance is optimized for your specific application.

Our customer base is global. Contact Us:

Polymer Synergies, LLC

5316 Lena Road, Suite 102
Bradenton, FL 34211 U.S.A.

Phone: 856-981-4381

Email: drjoe@polymersynergies.com

<https://polymersynergies.net>

Senior roles. Real impact.

Join our select network of polyurethane experts.

Why Join ExpertMatch



Specialized expertise



Confidentiality



Efficiency



Global opportunities

Our Candidate Promise

We value your time.

- No CV requests unless there's a clear match
- No irrelevant job offers or unnecessary calls
- Transparent, honest feedback on role suitability

Ready to advance your PU career?

Join PU ExpertMatch today



Contact us

www.htcglobal.asia/pu-expertmatch



Right
Knowledge

Right
Profile

Right
Person

We match companies with people who've already solved the problems you're facing.

Skip the resume pile.

*Get a verified
polyurethane
recruitment expert
who understands.*

HOW EXPERTMATCH WORKS



Why Clients Choose PU ExpertMatch

"What stood out was the experience. The candidate they introduced had direct experience with our foam line challenges. No ramp-up, just results."

Director of Operations, Rigid Foam Manufacturer

"Their process is clean. Milestones are clear, Clear communication, and we knew what to expect. It felt like working with an internal team, not an agency."

Technical Head, Elastomer Division

"We needed someone who could own the problem and deliver results. Their candidate did exactly that."

Plant Manager, Flexible Foam Manufacturing Plant

"They didn't just made promises. They showed us proof. Background checks, track records, and technical references were all in place before we even spoke to the candidate."

Managing Director, Flexible Foam Converter



Right Supplier, Right Fit, Right Time

Your support for sourcing



From Spec to Match

- Clear Specification
- SMART Criteria
- Matching Shortlist
- Competitive Quotes

Your choice !

From Quote to Supply

- Clear Overview
- Strong Reasons
- Mitigated Risks
- Fast Onboarding

Your decision !



www.htcglobal.asia/pu-sourcingdesk





Right Customer, Right Fit, Right Time

Your path to the buyer shortlists



Sample, Quote, Supply

- Clear specifications.
- Relevant solution.
- Fast onboarding.
- Submit your offer

Your offer !

From Capability to Demand

- Showcase your capabilities.
- Reach new markets.
- Get relevant enquiries.
- Convert more orders.

Your success !



Register in PU Network

Join the network



Global Polyurethane Directory



PUReview

TechnoBiz

COMPANY PROFILE >>>



TU MATERIALS

We are TUM, a sino-foreign joint venture started from 2013. With the combined advantages of monomer resources, state-of-the-art manufacturing system and strong R&D support, we are committed to provide our customers with high-performance materials of the best quality.

TU Materials' main products include five series

Low-Free Prepolymer

Including PPDI-, TDI-, and MDI-based systems. The TDI type features extremely low free monomer content, offering high processing safety and excellent stability.

Thermoplastic Polyurethane Elastomers (TPU)

PPDI-based specialty TPU with excellent wear resistance, high resilience, and wide temperature tolerance.

MDI Rotational Casting and Mining Three-Component Systems:

Rotational casting grades with strong hydrolysis, cut, and abrasion resistance. Mining systems suitable for seawater environments, hardness 60-95 Shore A.

Specialty Isocyanates

PPDI with highly symmetrical molecular structure; 1,3-H6XDI and 1,4-H6XDI provide short gel times and excellent optical stability.

Waterborne PUDs

Featuring anti-yellowing properties, high-temperature resistance, and outstanding mechanical performance.

PPDI TPU Series

- High wear-resistant & resilience
- Wide temperature tolerance & long service life
- Oil / corrosion resistant & low compression set
- The Best Choice for Harsh Conditions

Specialty Polyurethane Elastomers

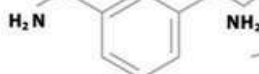
PPDI TPU

PPDI

- Products with superior dynamic properties & low internal heat.
- Excellent performance under both high & low temperatures.



MXDA



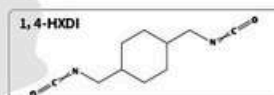
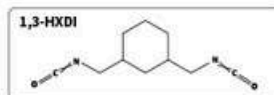
High-Performance Prepolymer Series

- Quasi-MDI Prepolymer System
- LOW-FREE PREPOLYMERS: PPDI, TDI, AND OTHERS
- Rotational Casting Prepolymers

PPDI, TDI Repolymer System

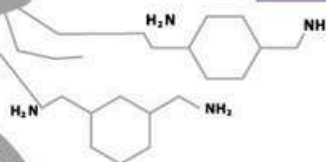
1,3-HXDI/1,4-HXDI

- Excellent anti-yellowing and light stability
- Outstanding heat resistance



1,3-BAC/1,4-BAC

Special diamines



Whatsapp/Tel: 15072908283
E-mail: hanfurong@hifichem.com



苏州湘园新材料股份有限公司
SUZHOU XIANGYUAN NEW MATERIALS CO. LTD

The world's largest producer of MOCA

-  Created in 1992
-  The only supplier of MOCA to EU market
-  2 R&D centers and advanced detection and analysis instruments
-  54 patented inventions



Product name	CAS NO.	Product name	CAS NO.
MOCA	101-14-4	HQEE	104-38-1
ML- 200	55347-69-8	HQEE-L	849677-06-1
MCDEA	106246-33-7	HER	102-40-9
MOEA	19900-65-3	XYLINK 1604	32961-44-7
XYLINK 740M	57609-64-0	DETDA (E100)	68479-98-1
XYLINK 311	21646-20-8	DMTDA (E300)	106264-79-3
XYLINK P1000	54667-43-5	(Aldimine) XYLINK3767	54914-37-3
XYLINK P650	54667-43-5	DMD230	152637-10-0
XYLINK P250	54667-43-5	OCA	95-51-2

SUZHOU XIANGYUAN NEW MATERIALS CO.,LTD

ADD : No.25/27 Pingsi Road Suzhou 215001 China

Email: janeluo@chinamboca.com; anna@chinamboca.com

TEL: 86-512-67536550

Http: //www.chinamboca.com



Shanghai Chic New Material Co., Ltd.

Company Introduction

Founded in 2007, Shanghai Chic New Material Co., Ltd. is a leading high-tech enterprise in China that provides anti-oxidation solutions for polyether, polyurethane, lubricants & grease (additives), rubber & plastics, etc. The company integrates research, production and sales, and is mainly committed to the research & development and application of chemical products: antioxidants, organic silicon, etc.

The company has a R&D center in Shanghai Caohejing High-tech Development Zone, with a first-class antioxidant R&D team and independent intellectual property rights. In order to be responsible for quality and service, Chic registered the "奇克" trademark at the beginning of its establishment. The company has advanced production equipment and perfect testing equipment to ensure the stability of product quality. Continuously launch new products at the forefront of the world, which are widely used in petroleum, petrochemical, polyether, polyurethane, lubricating oil, grease, rubber, plastic, and other industries. It has been widely supported and appreciated by the society and the industry.

Chic Company has a total production capacity of about 6,000 tons of 1135 and 5057, and a production capacity of about 15,000 tons of compound antioxidants. Adopt international authoritative quality system certification and safety system certification, so that customers can obtain greater quality and safety guarantee in use.

The company provides anti-oxidation solutions for global customers, takes the market as the center, technological breakthrough and innovation as the core, and customer satisfaction as the purpose. The company adheres to the enterprise spirit of loyalty, integrity, innovation and truth-seeking, and develops new products and system solutions according to customer needs. Chic provide reliable quality products and better service, and reduce costs. Chic always contribute to the global antioxidant business.

In 2014, Chic established Jiangxi Lianghua Technology Co., Ltd. in Shangrao City, which is a beautiful forest livable and high-speed railway hub city. The new factory covers an area of more than about 45,000 square meters. Lianghua Company adopts a full set of American craftsmanship and technology. Employ professional management personnel who have worked in the United States antioxidant company for more than ten years to be responsible for the company's safety, quality, process, technology, equipment, and operation control. The implementation of scientific management ensures sufficient supply of high-quality products. The company's production capacity can reach: component antioxidant (1135, 5057, 1076 and other products) 15,000 tons/year, compound antioxidant 20,000 tons/year.

With the company's 12 years of innovation, struggle and accumulation, Shanghai Chic Company and Jiangxi Lianghua Company can simultaneously ensure the production and sales of high-quality products. The company has users all over the country, and its products are exported to Southeast Asia, Europe and the United States, and we're in a leading position in the industry in China.

诚信

Integrity

沟通.合作

communicate collaborate



E-mail:owen@chicchem.com

Tel:0086-13761633452



Pioneer in PU Additives
PU助剂先锋

Qiguang Enterprise was established in 1988 and is a one-stop enterprise engaged in the production, operation, and sales of polyurethane catalysts. Enterprises engaged in the research and development, production, application, and sales of polyurethane raw materials, catalysts, and additives have served industries such as aerospace, automotive, furniture, and construction for over 30 years.

Headquartered in Shanghai, Qiguang has 20 branches and offices in various provinces and cities in China, including Taiwan, China (Taipei), Vietnam (Ho Chi Minh, Hanoi), Thailand (Bangkok), Malaysia (Kuala Lumpur), Indonesia (Jakarta), India (Mumbai, New Delhi, Chennai), South Africa (Johannesburg), Arabia (Dubai), Australia (Melbourne), Belgium (Brussels) Houston and other cities in the United States have sales companies and technical services, as well as factories in Shanghai, Guizhou, Jining, Shandong, and Zibo, Shandong, which have further improved the service system.

啓光企業 PU Catalysts Pioneer
聚脲催化剂先锋
QIGUANG CORPORATION

啓光大厦

Special recommendation

01 | Rigid foam catalyst series
DC PC-5 DC PC-41 DC K-15
DC PC-55 DC PC-46 DC DMDEE
DC PC-SL DC PC-77 DC T
DC PC-5 DC BDMA
DC PC-85 DC TMI-2
DC PC-8L DC TMI-30
Note: S is extended and L is low odor

02 | Flexible foam catalyst series
DCA-1 DC KE9727H DC C225
DC A33 VOC D DC 9727W DC C590
DC A33 VOC Y DC RP204Y DC SMP
DC A33 VOC W DC T9
DC AN38 DC T12
DC A33 DC 810
DC A400

03 | Silicone Series

Flexible foam Silicone	Slow rebound Silicone	Rigid foam Silicone	High rebound Silicone	Molded Silicone
DC868	DC5950M	DC5801	DC8333	DC3002
DC540	DC650	DC5802	DC8309	DC3150
DC580	DC658	DC5803	DC8100	
DK580	DC8002M	DC5804	DC80366	
DC866	DC5966	DC5805		
DC8123M		DC6900		
DC618M				
DC898				
DC2470M				
DC1904 Reticular				
DC G1104 Imitation high rebound				
DC590				
DC818				
DC878				
DC4900				

04 | Other additives series
DC G510 antibacterial agent
DC G520 acaricides
DC DP1022A pull agent
DC P1862 hardener
DC FE2035 hardener
DC FH300 hardener
DC BL6688 flame compound
DC 901 anti-bright spots
DC C520 antioxidant
DC QV28 anti-yellowing agent
DC 210 softener
DC antistatic agent

DC 5050 dealdehyde
DC 6070 anti-precipitation agent
DC Q2206 slow rebound silicone powder
DC WD1205 light bubble stabilizer
MESAMOLL cleaning agent / plasticizer
DC Q100-A high rebound opening agent
DC 1121 perforating agent
DC 9758HX demoulding agent
DC 501 rough hole chaos agent
DC 502 fine hole chaos agent
Various types of paste
Sponge essence

啓光企業 PU Catalysts
QIGUANG CORPORATION

QIG

Experts around you PU Catalysts Pioneer

China Headquarters

Address: 5F, No. 581, Qiguang Building, Middle Yan Chang Road, Shanghai

Tel: 021-56777378

Fax: 021-56771922

Website: www.qgpuchem.com

E-mail: shqiguang@163.com

**Our Future
Lies In
Quality & Creativity**



Leading Polyurethane Additives Manufacturer



OSiC: Focus on special silicone and PU additives

Listed Company

in China stock market

Vice Chairman Unit

of China Polyurethane Industry Association (CPUIA)

Standardization Administration Member

of CPPIA (China Plastics Processing Industry Association)

6000mt/a

SH Facility

26000mt/a

ZJG Facility+SH Facility (2020)

8%

R&D as Sales Revenue

30%

Annual Sales Growth

OVERVIEW:

OSiC is a global performance materials company and we strive to be our customers' commercial partner of choice, since its inception we have supplied additives to the polyurethane foam industry.

Our urethane additives comprises silicone surfactant, catalyst and processing additives. The industries we served include stabstock foam, rigid foam, microcellular foam, PU Leather and many others. Our urethane additives have been formulated to meet performance and processing technology needs and are manufactured to exacting standards.

THEY CHOOSE US:



XINLIANG

Popular polyurethane factories

Ningbo Xinliang Machinery Co., Ltd

Website: www.xinliang-pumachine.com

Our Aim

Customize exclusive
polyurethane
product solutions for customers

Ningbo Xinliang Machinery Co., Ltd.
is an enterprise combining industry and
trade, dedicated to producing
polyurethane foaming equipment,
polyurethane foaming production lines,
and cyclopentane polyurethane foaming
complete equipment.
It is a professional high-tech enterprise
specializing in the research and
development, manufacturing,
and technical services of polyurethane
foaming equipment.
It has more than ten years of professional
design experience...

Address: Kangshan Industrial Zone,
Yuyao City, Ningbo City, Zhejiang Province

Contact information

Mobile: +86 13867881815 (whatsapp same)
Office : 0574-62853033.
Fax : 0574-62853032
Email : jorjy@xinliang-pumachine.com



Workshop

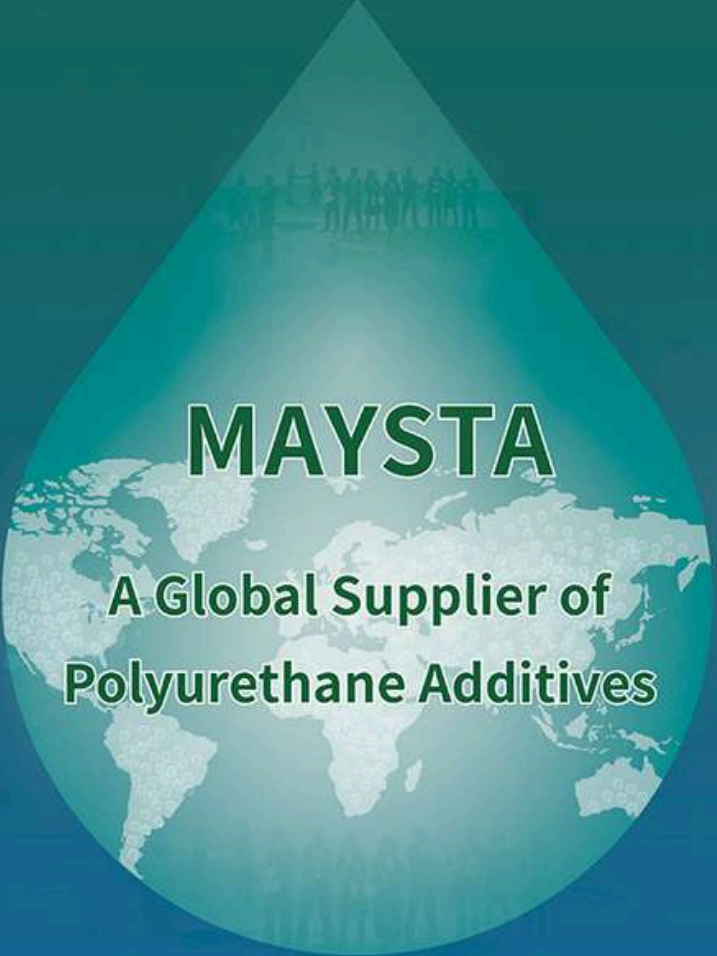


Polyurethane high-pressure injection machine



Cyclopentane series high-pressure injection machine





MAYSTA

A Global Supplier of
Polyurethane Additives

MATESTAB®

Silicone Surfactants

MAYCAT®

Catalysts

MAYADD™

Processing Additives



CONTACT US

🌐 www.maysta.com

☎ Tel: +86 25-85576548

🌐 www.pu-adds.com

☎ Fax: +86 25-85570505

✉ email: info@maysta.com



Jintang Company Profile

Jintang Technology is a high-tech enterprise integrating R&D, production, sales, application and service. It is a professional manufacturer of thermoplastic polyurethane (TPU) with leading technology. Jintang Technology's technical center cooperates with domestic universities and is committed to innovative work in the field of TPU new product development and application. The products are sold all over the world and Jintang Technology is well known TPU supplier domestic and abroad. The company has passed ISO9001 and ISO14001 system certification.

Jintang TPU Products are Widely Used



Service Purpose

- We'll Create Value with You Forever.
- We'll Contribute Advanced Solution to You Forever.

Corporate Honors

- | High and New Technology Enterprises Certification
- | Specialized, Sophisticated, Distinctive and Novel Shanghai Enterprise
- | Technology-based small and medium-sized enterprise of Shanghai
- | Standing Director unit of China Polyurethane Association
- | Pioneering Enterprise of Innovation and Entrepreneurship in Polyurethane Industry
- | Member Unit of the Shanghai Polyurethane Industry Association
- | Standing Director Unit of the Polyurethane Industry
- | Member Unit of the China Adhesive and Tape Industry Association

Trusted Partner in TPU Industry



PROFESSIONAL SUPPLIER OF PU FOAM SCRAP

Dongguan Fung Billion Furniture Material Co., Ltd



www.fungbillionfoam.com

COMPANY PROFILE



Dongguan Fung Billion Furniture Materials Co., Ltd was founded in 2003, is a leading enterprise specializing in the collection and processing of waste foam materials. Our product range includes: mixed color pu foam scrap, white skinless foam, black foam without skin, filter foam scrap, dali skin foam, old waste foam, high-density insole foam scrap, memory foam scrap, bra fabric foam, shredded bra fabric foam and car seat foam scrap etc. We can also provide the

foam crushing machine. If need, welcome to advise.

Foam waste can be reused in various ways, including being processed into new foam products, used for re-bonding or insulation, or reused in creative projects. Proper management and recycling of foam waste is important both for environmental reasons and for potentially reducing costs for businesses that generate this type of waste.

We invite you to join us, working together to contribute to the beauty of our planet and make a positive impact on its future.



Our Products

Product Series	Product Material
A Grade Foam Scrap	95% polyurethane foam +5% skins
B Grade Foam Scrap	85% polyurethane foam +15% skins
Filter Foam Scrap	100% filter foam materials
Crushed Bra Fabric Foam	100% crushed fabric bra foam

Factory Address: ChaoLang Industrial Area, ChaoShan Town, DongGuan City, GuanDong Province, China

Contact: 0086-13763231616 (Quinn Tian); +86-15875576145 (Vicky Chen)

Email: sales@fungbillionfoam.com

PROFESSIONAL MANUFACTURER AND SUPPLIER OF POLYURETHANE MATERIALS



www.junchi-chemical.com



Junchi New Materials Company has been focusing on the research and development, production, sales and promotion of polyurethane materials for more than 20 years, and has three subsidiaries:

Tianjin Junchi New Materials Technology Co., Ltd., established in 2022, is mainly engaged in the research and development, sales, application and promotion of new polyurethane materials. It is the management headquarters R&D and sales center of Junchi New Materials. The company's main products include polyurethane main materials, silicone additives, catalysts, solvent-free adhesives, flame retardants, etc.

Cangzhou City JunchiWeiye Chemical Co., Ltd. was established in 2004. It is a specialty chemical company specializing in polyurethane materials. Its products are exported to Japan, Russia, Malaysia, the United Arab Emirates, Pakistan, India, Croatia, Brazil, Spain, Canada, Chile and other countries. In the past 20 years, the company has been committed to providing customers with excellent products and scientific solutions, and to being a leader and promoter at the forefront of the polyurethane industry chain.

Cangzhou Junchi New Materials Technology Co., Ltd. was established in June 2018. It is a specialty chemical company integrating the research and development, production and operation of new polyurethane polymer materials. It has a production capacity of 20,000 tons of silicone additives and 50,000 tons of modified isocyanate-related products, as well as world-class production facilities and internal R&D capabilities.



Our Products

Product Series	Product Materials
Flexible Polyurethane Foam	TDI 80/20 , Polyether Polyol 3000/3500MW , Polymer Polyol 15%/25%/45% , Standard/Flame Retardant /Special Flexible Foam Silicone Oil, Catalyst A1/ A33/ SMP / T-9/ T-12
High Resilience molded Polyurethane Foam	Modified MDI , Polyether Polyol 5000/6000MW, MDI /TDI system Silicone Oil, Catalyst A300/A400/C225
Rigid Polyurethane Foam	PMDI , Polyether Polyol 4110 , Blend Polyol , Appliances/ Non-Appliances/ OCF Rigid Foam Silicone Oil, Catalyst PC5/PC8/PC41 , Flame Retardant TCPP / TCEP/ TEP
Coatings/Adhesives/ Sealants/Elastomers	T65/35, T-100, MDI, CASE Polyol 400-3000MW, Polyurethane Adhesive for Flexible Package, Polyurethane Adhesive for Rebond Foam, Polyurethane Adhesive for Filter

Office Add: The building E67, No. 1 Sizhi Road, Xuefu Industrial Zone, Xiqing District, Tianjin City, China
Factory Add: East Area of Cangzhou Lingang Economic and Technological Development Zone, Hebei Province, China. Tel : +86-317-3088616
Email: junchi_wh@126.com



华茂伟业绿色科技股份有限公司

B-FCTL Co., Ltd



B-FCTL Co., Ltd. was established in 2014 and is located in Cangzhou Lingang Economic and Technological Development Zone, a national chemical park in Cangzhou City, Hebei Province, covering an area of 266,117.27.

We have obtained Certifications for the ISO 90001 Quality Management System, ISO 14001 Environmental Management System, ISO 45001 Occupational Health and Safety Management System, ISO 50001 Energy Management System, and GB/T 29490-2023 Intellectual Property Management System.

Our company produces multiple catalysts in the field of polyurethane. Among these, DMDEE—developed and manufactured of our own realized domestic self-production, and our products are sold well at home and abroad, providing service to several world-class enterprises. Additionally, we also produce TEDA, DMEA, DMAEE, BDMAEE, A33, A-1, and formulations based on all-water blown polyurethane foam polyols.

Add: South of Chemical BLVD, Cangzhou Coastal-port Economic and Development Zone, Hebei China

Tel: 010-82755330

Website: <https://www.hm-gt.com>

Email: sales@hm-gt.com



Polyurethane Business News

PUReview

TechnoBiz

BASF introduces low-VOC Polyurethane Catalyst Lupragen® N 208



BASF adds a modern amine catalyst, Lupragen® N 208, to its portfolio of Lupragen® amine catalysts to produce polyurethanes (PU) foams. It is a low VOC catalyst and this property makes Lupragen N 208 particularly suitable for the manufacture of PU-products for applications in which stringent low VOC standards must be met. Examples range from semi-rigid foams for automotive interiors such as dashboards or armrests to more flexible foams for mattresses and upholstery.

- **Modern catalyst to meet stringent low VOC standards**
- **Broadly applicable for production of flexible, semi-rigid and rigid foams**
- **Reactive version of blowing catalyst Lupragen® N 205**

BASF is adding a modern amine catalyst, Lupragen® N 208, to its portfolio of Lupragen amine catalysts for the production of polyurethane (PU) foams. Lupragen N 208 (chemical name: N,N,N'-trimethyl-N'-hydroxyethyl-bisamino ethylether, HE-TMAEE, CAS 83016-70-0) will be produced at BASF's Ludwigshafen Verbund site and will be marketed worldwide under the Lupragen trademark.

As a reactive catalyst, Lupragen N 208 is firmly integrated into the PU polymer network during foam production; thus it cannot escape from the foam afterwards. This prevents the emission of volatile organic compounds (VOCs), which can cause unwanted effects such as odor. Overall, this property makes Lupragen N 208 particularly suitable for the manufacture of PU products for applications in which stringent low VOC standards must be met. Examples range from flexible foams for mattresses and upholstery to more rigid foams for automotive interiors such as dashboards or armrests.

"We welcome Lupragen N 208 as new member in our portfolio of Lupragens to complement our existing blowing catalyst Lupragen N 205 (Bis(2-dimethylamino-ethyl)ether, BDMAEE). With this development we are responding to an increasing demand for low-VOC solutions from our customers," says Gereon Altenhoff, Product Manager PU Catalysts, Intermediates Europe, BASF.

BASF offering one of the broadest amine catalyst portfolios

BASF is a leading producer of amines globally, including a broad portfolio of amine catalysts for PU marketed under the Lupragen brand. PU catalysts are typically tertiary amines, which are required to facilitate the reaction of the main components, isocyanate and polyol. Depending on the choice of catalyst, the PU forming process can be controlled to enhance the gelling or blowing reaction. BASF's portfolio of amine catalysts includes several products, such as Lupragen N 208, which are designed to support customers in the polyurethane industry in their efforts to minimize emissions from foams.

TechnoBiz
PU
WEEK

30 Mar-2 April 2026
Kuala Lumpur, Malaysia

10-12 March 2027
Bangkok, Thailand

Driving Efficiency in China's Automotive Design: RAMPF Starts Close Contour Casting Production in Nantong



Based on customer CAD data, RAMPF China produces the casting mold and carries out the casting process with targeted heat treatment and quality control. Post-curing ensures high mechanical properties. The ready-to-mill casting is delivered to the customer, enabling them to focus entirely on milling.

The international RAMPF Group has officially launched Close Contour Casting production at its Nantong site. This advanced tooling technology delivers near-net-shape polyurethane preforms with unmatched speed, cost-efficiency, and sustainability – significantly accelerating automotive design development in China.

Key Takeaways

- RAMPF's Chinese subsidiary has officially launched Close Contour Casting production at its Nantong facility.
- RAKU® TOOL Close Contour Castings are semi-finished polyurethane systems, supplied as three-dimensional preforms that are near the final shape of the produced part.
- Close Contour Casting technology actively supports sustainability goals by reducing energy consumption and minimizing production waste.

RAKU® TOOL Close Contour Castings are semi-finished polyurethane systems, supplied as three-dimensional preforms that are near the final shape of the produced part.



The manufacturing process begins with a lightweight mold – crafted from EPS or RAMPF's RAKU® TOOL SB-0080 polyurethane styling board – based on data provided by the customer. After applying a release agent, the mold is filled using a specialized casting process. Post-curing and removal from the mold are followed by quick and easy milling.

Key benefits of RAMPF's Close Contour Casting technology:

- Faster machining with reduced tool wear and material waste thanks to close-contour shape
- Minimal manual finishing due to a seamless, smooth, and dense surface (density 0.8 g/cm³)
- No handling of liquid chemicals – full focus on milling technology
- Excellent dimensional stability with low internal stress and isotropic properties comparable to board material
- Consistently high-quality standards for reliable performance

RAKU® TOOL Close Contour Casting systems are used to manufacture high-performance master models, cubing models, and data control models, amongst others.

Tiger Meng, CEO of RAMPF China:

Our local Close Contour manufacturing infrastructure cuts shipping times, reduces import costs, and enables faster market responsiveness. Most major global OEMs host design centers in Nantong, allowing them to directly benefit from RAMPF's cutting-edge technology. What matters greatly to us and our customers: RAKU® TOOL Close Contour Casting actively supports sustainability goals by reducing energy consumption and minimizing production waste.

Denny Föhn, Director Business Center Tooling & Modeling at German-based RAMPF Advanced Polymers:

Customized blocks and advanced shell-casting structures enable faster, more cost-efficient solutions while ensuring superior product quality. We are excited that customers in China can now also leverage the benefits of RAMPF's pioneering Close Contour Casting technology.

Researchers make sponges recyclable without toxic chemicals

Researchers at the University of Twente have developed a method to recycle polyurethane foam from mattresses and furniture and also household sponges. They did this safely, without using toxic chemicals. The discovery offers a circular solution for millions of tons of hard-to-recycle waste.

Polyurethane (PUR), the foam found in mattresses, furniture, and countless other products, typically ends up in landfills or is incinerated after use because it is rarely reusable. Until now, only parts of the foam could be recovered, or a highly toxic substance was needed to recover the building blocks. *"For a long time, the use of phosgene, a lethal substance, was the only way to break apart this foam,"* says Jurriaan Huskens, project leader of the study. *"That is simply unacceptable if you really want to use recycling on a large scale."*

From mattresses to sports insoles

The Twente researchers have now found a way to completely disassemble the foam into the original building blocks, without dangerous chemicals. With a relatively safe and environmentally friendly compound, the foam is efficiently broken down into usable raw materials, which in turn can serve as the basis for new foam. *"We show that you can recover both the soft part and the hard part of the foam,"* adds Jean-Paul Lange. *"This makes it possible for the first time to make PUR truly circular."*

The method has been found to work on various types of foam, from mattresses and furniture to sports insoles and medical applications. This broad applicability increases the chance that the technology will be quickly adopted by industry. *"That's what makes this finding so powerful,"* says PhD student Ege Hosgor, first author of the study. *"We did not use artificially pure foam in the lab, but just foam as it is found in real-world products."*

Towards a circular future

This approach is a great step towards a circular economy for plastics and will significantly reduce waste. The researchers now want to further develop and scale up the method so that recycling on an industrial scale becomes possible. *"The great thing is that this process is not only safer, but also offers a real solution for the millions of tons of foam that are thrown away worldwide,"* says Huskens.

Learn more

Ege Hosgor is a PhD candidate in the department of Prof Dr Ir Jurriaan Huskens: Molecular Nanofabrication (MNF; Faculty of Science & Technology / MESA+ institute). Prof Dr Jean-Paul Lange is an honorary professor in the Department of Sustainable Process Technology (SPT; also Faculty of Applied Sciences). Together with colleagues, they published their research, entitled 'Polyurethane depolymerization by dialkyl carbonates: toward sustainable chemical recycling', in the scientific journal Green Chemistry.

DOI: <https://doi.org/10.1039/D5GC02533H>

Monument Chemical Launches Poly-CO₂[®]: High Performance Polyols from Captured Carbon



Monument has begun the first US-based production of polyols from renewable carbon this month at its manufacturing facility in Brandenburg, KY. The new product line of polycarbonate ether (PCE) polyols is based on a process from Eonic Technologies that replaces fossil-based feedstocks with captured CO₂ and reduces global warming potential by 20-30%.

Branded Poly-CO₂, Monument's new line of PCE polyols can be used to make high-performance polyurethanes for furniture and mattresses, automotive parts, apparel and footwear, coatings, adhesives, sealants, and elastomers. Incorporating carbon at the molecular level can impart performance benefits in a range of polyurethane applications from foams to flame lamination to adhesives and elastomers. For example, Poly-CO₂ can improve resilience in mattress foams and durability in coatings.

Poly-CO₂ polyols also have several environmental benefits. In addition to reducing the carbon footprint of end products, they allow companies to design for circularity by keeping carbon in use and out of the atmosphere. Moreover, they can be used alone or together with recycled and bio-based polyols, and they are compatible with emerging recycling systems. Thanks to Eonic's proprietary renewable carbon technology, Poly-CO₂ products overcome some of the formulation, processing, storage, and handling challenges sometimes found in other CO₂-based products. For example, foam manufacturers can continue using the same standard surfactants and catalysts used in traditional polyether and polyester polyols. Additionally, with Poly-CO₂, carbon dioxide is more evenly distributed along the backbone of the polymer to ensure performance, quality, and stability.

The new product line will launch at pilot scale, with commercial scale production coming to market in the coming years.

"This is a big step for Monument and the industry as a whole. Historically, the introduction of new technologies is met with several barriers to entry, including processing constraints, handling concerns, and application feasibility. Econic's technology will allow us to upcycle waste carbon dioxide into polyols for high-performance materials, while eliminating a lot of those barriers to commercialization. We're excited to be partnering with Econic and playing a role in moving the industry forward in innovation," said Deb Schofner, Monument Sales Director.

"The entire industry is determined to drive toward net-zero, but given how traditionally standardized this industry is, not everyone is willing to take the first leap. Monument is always looking for new ways to innovate and expand our capabilities to better serve our customers. We saw this as an opportunity to be that role model for our industry and to show our customers that regardless of their needs, we can create new products and processes that meet them — and we can deliver positive change for the future while doing it," explained Don Phillips, Vice President, Oxides.

"Companies around the world are transforming their product portfolios to better serve society now and in the future. Monument is leading the way in sustainable polyols by being the first American company to commercialize this new product line based on renewable carbon, which will give their customers a competitive advantage," said Keith Wiggins, CEO of Econic Technologies.

Poly Urethane²⁰²⁶



**A Monthly *Virtual* Forum
on Polyurethane Industry
& Innovations**

A **New** Initiative for the Global Polyurethane Industry

Poly Urethane ²⁰²⁶ **X**

TechnoBiz

**A Monthly *Virtual* Forum
on Polyurethane Industry
& Innovations**

<https://conference.technobiz.org>



Poly Urethane

2026



***Monthly Virtual Forum
on Polyurethane Industry
and Innovations***

PolyurethaneX 2026 is a new initiative from TechnoBiz, developed as a monthly virtual conference series dedicated to the global polyurethane industry. Each session focuses on a specialised theme—covering PU chemistry, raw materials, formulations, processing technologies, equipment, performance testing, fire safety, sustainability, recycling, and application innovations—bringing together leading experts, researchers, system houses, manufacturers, and industry professionals from across the world.

The key objectives of PolyurethaneX are to promote continuous technical learning, highlight cutting-edge developments in polyurethane science and engineering, strengthen collaboration between industry and academia, and provide an accessible global platform where PU professionals can update their knowledge, share insights, and explore new opportunities across diverse PU applications.

Schedule 2026

15 January 2026: **PU Raw Materials & Additives Forum**

19 February 2026: **Flexible Foams Forum**

19 March 2026: **Rigid PU & PIR Forum**

16 April 2026: **PU Adhesives & Coatings Forum**

21 May 2026: **PU Elastomers Forum**

18 June 2026: **PU Processing & Machinery Forum**

16 July 2026: **PU Fire Retardancy Forum**

20 August 2026: **PU Recycling Forum**

17 September 2026: **Automotive PU Forum**

22 October 2026: **Construction PU Forum**

19 November 2026: **PU Testing & QA Forum**

17 December 2026: **Sustainable PU Forum**

Time Schedule : 14:00 – 17:00 CET (Central Europe Time)

Language : ENGLISH

Focus Areas

PU Raw Materials & Additives Forum 2026 | 15 Jan 2026

- Polyols, Isocyanates & Blowing Agents
- Catalysts & Surfactants
- Flame Retardants, Fillers & Additives
- Regulatory & Safety Practices
- Formulation Insights & Case Studies

Flexible Foams Forum 2026 | 19 Feb 2026

- CFlexible PU Foam Chemistry & Formulation
- Slabstock and Molded Foam Processing Technologies
- Comfort Applications: Furniture, Bedding & Seating
- Performance, Emissions & Quality Optimization
- Recycling, Troubleshooting & Industry Case Studies

Rigid PU & PIR Forum 2026 | 19 Mar 2026

- PU & PIR Chemistry, Formulations & Blowing Agents
- Insulation Products: Boards, Panels & Spray Foams
- Fire Safety, Thermal Stability & Performance Testing
- Processing Technologies: Machinery & Production
- Building Standards, Compliance & Case Studies

PU Adhesives & Coatings Forum 2026 | 16 Apr 2026

- Chemistry of PU Adhesives, Sealants & Coatings
- 1K, 2K, Moisture-Cure & Hot-Melt Technologies
- PU Dispersions (PUDs) & Waterborne Systems
- Structural Bonding, Lamination & Automotives
- Performance Testing, Sustainability & Case Studies

PU Elastomers Forum 2026 | 21 May 2026

- Elastomer Chemistry: Casting, Thermoset & TPU
- Mechanical Performance & Durability
- Industrial Applications
- Additives & Processing Technologies
- Quality Control & Failure Analysis

PU Processing & Machinery Forum 2026 | 18 Jun 2026

- Metering, Mixing & Machine Technologies
- Mold Design, Temperature Control & Tooling
- Automation, Robotics & Smart Production
- Process Optimization for Foams & CASE
- Energy Efficiency, Sustainability & Case Studies

PU Fire Retardancy Forum 2026 | 16 Jul 2026

- Fire Behavior of PU/PIR & Flame-Retardant Systems
- Smoke Suppression, Toxicity & Safety Considerations
- Global Fire Standards, Certifications & Testing Methods
- Fire-Safe Formulations for Construction & Transport
- Performance Balance, Case Studies & Lessons Learned

PU Recycling Forum 2026 | 20 Aug 2026

- Mechanical & Chemical Recycling Technologies
- Recycled Polyols: Quality, Challenges & Applications
- Circular Economy Models & Foam Waste Management
- Regulations, Standards & Sustainability Frameworks
- Bio-Based Innovations & Global Case Studies

Automotive PU Forum 2026 | 17 Sep 2026

- PU Foams, Seats & Interior Components
- Lightweighting, Energy Absorption & NVH Solutions
- Adhesives, Coatings & Elastomers in Automotive Systems
- Fire, Emissions, Durability & Safety Requirements
- E-Mobility Applications & OEM/Tier-1 Case Studies

Construction PU Forum 2026 | 22 Oct 2026

- PU Insulation Foams & Building Applications
- Waterproofing, Sealants & Coating Systems
- Flooring, Panels, Doors & Construction Components
- Energy Efficiency, Weathering & Moisture Protection
- Spray Technology, Compliance & Construction Case Studies

PU Testing & QA Forum 2026 | 19 Nov 2026

- Physical, Mechanical, Thermal & Chemical Testing Methods
- VOC, Emissions, Aging, UV & Weathering Evaluations
- Foam Defects: Identification, Prevention & Troubleshooting
- Quality Assurance Systems, Standards & Compliance
- Failure Analysis & Laboratory Case Studies

Sustainable PU Forum 2026 | 17 Dec 2026

- Bio-Based & Low-Carbon PU Systems
- Circularity & Recycling
- Sustainable Additives & Waterborne Technologies
- Low-VOC & Eco-Efficient Processing
- ESG, Regulations & Case Studies



Poly Urethane

2026



**Monthly Virtual Forum
on Polyurethane Industry
and Innovations**

Call for Papers / Speakers

TechnoBiz invites experts, technologists, and researchers from around the world to participate as speakers in PolyurethaneX 2026, a monthly virtual conference series dedicated to polyurethane chemistry, materials, processing technologies, performance, sustainability, and application innovations. We welcome presentation proposals that match the specialized theme of each monthly forum. There is no fee to participate as a speaker, and all contributions are greatly valued by the global polyurethane community.

Interested speakers are requested to email their proposal, including presentation title, summary/abstract, short biography, and a portrait photo to peram.technobiz@gmail.com, mentioning the forum name and date in the subject line. Each confirmed speaker will receive a 20-minute presentation slot, followed by Q&A. All presentations must be delivered in English.

Delegate Registration Fee

PolyurethaneX 2026 is designed for professionals, technologists, researchers, entrepreneurs, and students in the polyurethane industry. Delegates gain insights into the latest trends, innovations, and best practices in PU materials, processing, applications, and sustainability, while benefiting from global knowledge-sharing and networking opportunities.

Single Event Registration (per Person)

- Individual Delegate: USD 50 | Rs. 1000
- Group Registration (3+ delegates): USD 40 | Rs. 900

Full Year Access (12 Events) (per Person)

- Individual Delegate: USD 300 | Rs. 10,000
- Group Registration (3+ delegates): USD 200 | Rs.8,000

Delegate Benefits

- Access to live sessions (5 hours per event)
- Interaction with global experts during Q&A
- E-certificate of participation
- Access to recordings for 30 days

Registration link : <https://conference.technobiz.org>

Poly Urethane ²⁰²⁶ **X**

TechnoBiz

**Monthly Virtual Forum
on Polyurethane Industry
and Innovations**

Sponsorship

TechnoBiz invites companies and organizations to support PolyurethaneX 2026 as sponsors. Sponsorship provides global visibility, brand recognition, and direct engagement with key stakeholders across the polyurethane value chain. In addition, sponsor teams benefit by learning from the monthly forums, gaining valuable insights into the latest developments in polyurethane science, technology, applications, and innovation.

Corporate Sponsorship (12 Events) : US\$ 2,000 | Rs. 100,000

- Logo featured in all 12 monthly PlasticsX forums (flyers, social media, event slides)
- Unlimited complimentary full-year delegate passes for sponsor company staff
- Sponsored presentation within a monthly theme
- Full-page advert in all 2026 issues of Plastics Review (20,000+ readers)
- Recognition as a Corporate Sponsor in all PlasticsX promotions and closing credits

Corporate Sponsorship (Single Event) : US\$ 200 US\$ | Rs. 10,000

- Logo featured the selected Forum of PlasticsX 2026 (flyers,, social media, event slides)
- Unlimited complimentary full-year delegate passes for sponsor company staff
- Sponsored presentation within a monthly theme
- Recognition as a Corporate Sponsor

Project Team - PolyurethaneX 2026



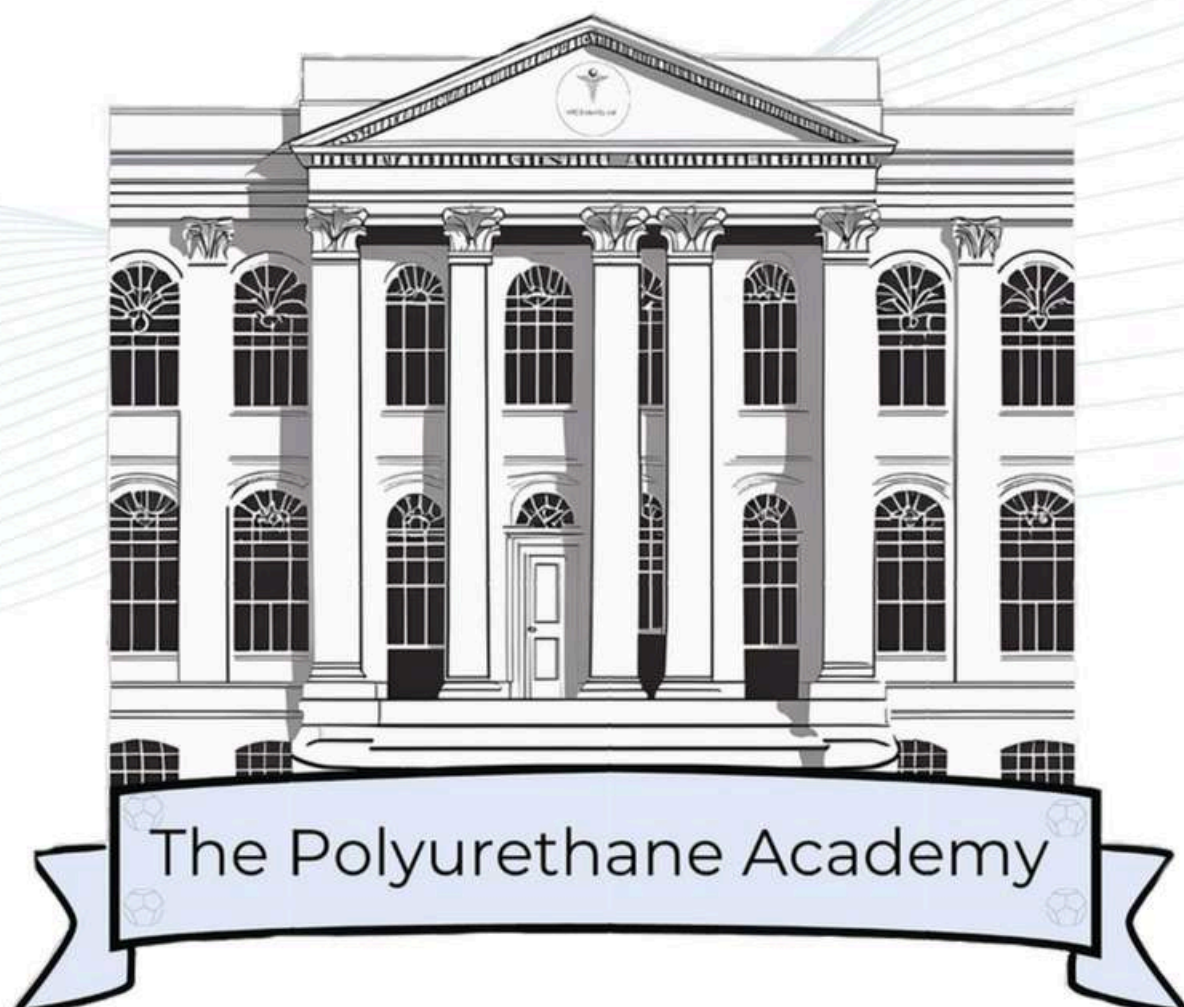
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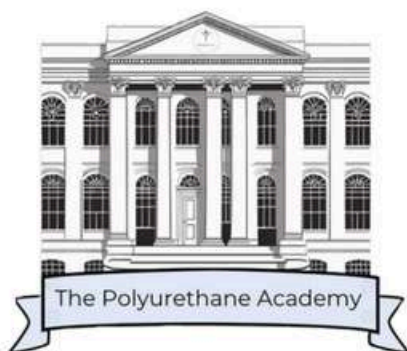
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Professional Training Courses for Flexible PU Foam Industries

www.htcglobal.asia



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www.htcglobal.asia

The Polyurethane Academy, a division at HTC Global Co., Ltd., is offering the following training programs that are suitable for professionals working in the flexible polyurethane foam industry.

- *Course 1:* PU Foam Science & Materials Overview (6 hrs)
- *Course 2:* PU Foam Manufacturing & Process Control (6 hrs)
- *Course 3:* PU Foam Quality & Testing Protocols (6 hrs)
- *Course 4:* PU Foam Plant Yield Optimization & Theory of Constraints (6 hrs)
- *Course 5:* PU Foam Business Supply Chain Strategy (6 hrs)
- *Course 6:* Business Excellence & EFQM of PU Foam Industry (6 hrs)
- *Course 7:* Sustainability & Innovation in PU Foam Industry (6 hrs)

Instructor: Stefan Hermes

Stefan has worked for nearly 25+ years in the worldwide PU and foam industry. He is currently the MD of HTC Global in Thailand and chairman of the APBA (in founding), the Asian PU Business Association. Before this, he was CEO of King Global, Thailand, a Greenfield Foam Manufacturing company, before that he was performing a long-term interim contract for Kurlon in India and five years there before Stefan was Executive Vice President Global Supply Chain & Business Excellence for FoamPartner in Switzerland, responsible for the global footprint, chemical procurement, SHE-Q and operational excellence.

Stefan has worked on various projects and assignments in the PU industry through his own company, Process Improvers, where he completed several supply chain & operations optimization projects within the USA, India, Russia, and China. He is a Chartered Member of the Institute of Transport and Logistics, a Member of the Council of Supply Chain Management Professionals (CSCMP), and a Corporate Member of the Netherlands-Thai Chamber of Commerce (NTCC).



Course Format

- Open / Inhouse
- In-Person / Online
- Can be Customized

Course Language

- English
- Dutch
- German
- French

The Polyurethane Academy

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Course 1: PU Foam Science & Materials Overview (6 hrs)

- **Introduction to PU Foam Industry:** • What is PU foam and how is it made? | • Why it matters: applications and unique properties | • Brief history and industry evolution
- **Market Overview & Trends:** • Key application areas: furniture, automotive, construction, packaging, specialty | • Regional/global market dynamics and growth drivers | • Sustainability, innovation, and regulatory trends
- **Types, Applications, and Innovations:** • Flexible vs. rigid PU foam | • Main and specialty application examples | • Ongoing innovations in foam technology
- **Materials and Chemistry Fundamentals:** • Core materials: polyols, isocyanates, additives | • Basic foam chemistry and structure | • Impact of material choice on foam properties
- **Raw Materials, Selection & Supply Chain:** • Criteria for selecting raw materials | • Testing and validation essentials | • Economics, sustainability, and supply chain considerations
- **Production, Machinery, and Process Control:** • Foaming and production process overview | • Role of machinery and automation | • Scrap management, process KPIs, and troubleshooting
- **Sustainability, Safety, and Business Impact:** • Key sustainability strategies in foam production | • Safety best practices in operations | • How process, people, and technology drive business results

Course 2: PU Foam Manufacturing & Process Control (6 hrs)

- **PU Foam Production Process:** • Main process stages: raw material preparation, mixing, foaming, curing, post-processing | • Key department functions and factory layout principles | • Role of SOPs and process standardization
- **Machinery & Equipment Selection:** • Core machinery: mixers, dispensing systems, curing ovens, cutting/finishing equipment | • Automation vs. manual operation: impact on consistency and yield | • Factors for equipment selection: capacity, flexibility, safety, maintenance
- **Process Control & Optimization:** • Monitoring critical parameters: temperature, pressure, mixing ratios, timing | • Real-time process monitoring and use of IoT/data analytics | • Common process deviations and troubleshooting methods
- **Lean Manufacturing & Continuous Improvement:** • Factory layout optimization for material flow and safety | • Kaizen, Just-in-Time, and waste minimization strategies | • Measuring and improving key performance indicators (KPIs)

Course 3: PU Foam Quality & Testing Protocols (6 hrs)

- **PU Foam Quality Fundamentals:** • Key quality parameters: density, hardness, cell structure, compression set | • Importance of specification compliance and consistency | • Link between quality and downstream performance
- **Testing Methods & Laboratory Practices:** • Standard QC test methods: density, hardness, tensile, flammability | • Sample handling, calibration, and documentation | • Role of international standards (ASTM, ISO)
- **Safety & Compliance in Testing:** • Essential PPE and laboratory safety protocols | • Handling chemicals and hazardous materials safely | • Regulatory compliance (product safety, REACH, MSDS)
- **Warehouse & Material Handling :** • Warehouse layout for safe chemical storage | • FIFO and inventory tracking for quality assurance | • Best practices for minimizing contamination and waste

Course 4: Foam Plant Yield Optimization & Theory of Constraints (6 hrs)

- **Material Balance & Yield Calculation:** • Key concepts: input, output, loss, and yield formulas | • Methods for tracking material flow and loss points | • Practical examples of improving yield in PU production
- **Theory of Constraints (TOC) Fundamentals:** • Identifying bottlenecks in PU manufacturing processes | • TOC Five Focusing Steps: identify, exploit, subordinate, elevate, repeat | • Tools for mapping and analyzing constraints
- **Troubleshooting & Fault Analysis:** • Common yield loss causes: mixing errors, curing issues, quality rejects | • Structured approach to root cause analysis and corrective action | • Case studies and real-world troubleshooting examples
- **Continuous Improvement for Yield:** • Tracking KPIs: waste, rework, and process efficiency | • Integrating yield improvement with lean and Kaizen practices | • Building a culture of proactive problem solving and optimization

Course 5: PU Foam Business Supply Chain Strategy (6 hrs)

- **Procurement Best Practices:** • Strategic sourcing of key PU raw materials | • Evaluating suppliers: quality, reliability, cost, ESG criteria | • Building resilience through dual sourcing and long-term agreements
- **Supply Chain Risk Management:** • Identifying and mitigating risks: price volatility, logistics, force majeure | • Tools for supplier audits, risk matrices, and contingency planning | • Managing global, regional, and local supplier networks
- **Supply Chain Optimization & Technology:** • Streamlining inbound logistics and material flow | • Using digital tools: ERP systems, supplier portals, inventory tracking | • Strategies for reducing lead times and improving on-time delivery
- **Sustainable Procurement & Compliance:** • Integrating sustainability in sourcing (bio-based, recycled, certified materials) | • Compliance with REACH, ISO, and customer requirements | • Measuring supply chain KPIs: cost, service level, sustainability impact

Course 6: Business Excellence & EFQM of PU Foam Industry (6 hrs)

- **EFQM Excellence Model Fundamentals:** • Key EFQM enablers: leadership, strategy, people, partnerships, processes | • Linking business excellence with PU manufacturing performance | • Benchmarking and continuous improvement cycles
- **Strategic Planning & KPI Development:** • Translating vision into measurable strategic objectives | • Designing effective business scorecards and performance dashboards | • Setting, tracking, and reviewing critical KPIs for PU operations
- **Integrated Quality, Safety & Innovation:** • Embedding quality and safety into the business excellence framework | • Fostering innovation culture and digital transformation | • Aligning business goals with ESG and sustainability initiatives
- **Application & Implementation:** • Using EFQM for process optimization and change management | • Facilitating cross-functional workshops and self-assessment | • Case studies: achieving operational and business excellence in PU industry

Course 7: Sustainability & Innovation in PU Foam Industry (6 hrs)

- **Sustainability in PU Foam Manufacturing:** • Key drivers: environmental impact, circular economy, regulatory trends | • Life cycle thinking: raw materials, production, product use, end-of-life | • Waste reduction and recycling strategies in foam plants
- **Innovation in Materials & Processes:** • Bio-based polyols, low-VOC formulations, and eco-friendly additives | • Digital transformation: IoT, data analytics, and automation for sustainability | • Benchmarking global best practices and new technologies
- **ESG & Compliance Integration:** • Meeting ESG (Environmental, Social, Governance) targets in PU operations | • Sustainable supply chain and responsible sourcing | • Compliance with global standards (ISO, REACH, customer requirements)
- **Driving Change & Value Creation:** • Building a culture of continuous improvement and innovation | • Cross-functional collaboration for sustainable product development | • Measuring and communicating sustainability performance to stakeholders

APBA

**Asian Polyurethane
Business Association**

www.apba.online

Membership Form



**Connecting
Polyurethane Industries
in Asian Region**