Participants in the powder coatings market have experienced an exciting journey, traversing both very high peaks and deep valleys. The changing landscape has provided both challenges and opportunities for resin suppliers and powder coatings formulators. Currently, the overall growth rate for powder remains above that of the coatings market in general, and despite several worrying conditions, most players in the market have a positive outlook as the powder coatings adventure continues into the future.

In general, the growth of the powder coatings market mimics the broad economic growth in the various regions of the world. The ChemQuest Group, a management consulting firm located in Cincinnati, OH, valued the 2005 global market for powder coatings at $4.1 billion based on sales of 1.2 million metric tons. ChemQuest expects the global market to grow 6.4% annually, with the highest growth in Asia (11% per year) and the lowest in Western Europe (1% per year), according to vice president Michael D. Brown. In the U.S., Kusumgar, Nerlifi & Growney (KNG) estimates that sales of powder coatings reached $1.4 billion in 2005, with the market growing at 4% annually. In Asia, KNG valued the 2005 powder coatings market at $2 billion, and increasing at a rate of 12% per year.

While there are a multitude of applications for powder coatings, just three main uses—general metal, appliances, and metal auto parts—account for two thirds of the U.S. market, according to Steven Nerlifi, a consultant with KNG. General metal is by far the largest end market and accounts for 55% of sales on a dollar basis and is growing at about 4% per year. Appliances and metal auto parts each make up about 6% of total
sales, with annual growth rates of 2% and 3%, respectively. Additional application areas include machinery and equipment, metal finishing, electrical insulation, conformal coatings, and other miscellaneous applications.

Despite the fact that growth rates have significantly declined from the double digit levels experienced in the 1990s, the powder coatings market is still growing at a healthier pace than the overall coatings market and, in general, faster than the average GDP—and this trend is expected to continue. The challenges to be overcome in the developed regions of the world are not insignificant, though. Dramatically increasing raw material and energy costs have impacted a sector of the coatings industry likely all others. The shift of manufacturing—particularly of metal fabrication—to lower cost regions of the world has been a large contributor to the decline of the growth rate in North America and Western Europe. And while less than 20% of the liquid OEM coatings market has been converted to powder, step changes in technology will be required before further growth can be achieved via this mechanism.

Both resin producers and powder coating manufacturers can take steps to increase the growth rate in the world’s developed regions. The high level of fragmentation in the market—there are over 70 powder coating formulators in North America alone—should be addressed through consolidation. Rationalization would also help reduce the overcapacity problem. Increased investment in R&D will be required in order to realize the necessary technology advancements that will lead to new application areas for powder coatings.

Maintaining an awareness of the needs of customers and providing flexible, responsive, and specialized service will be important as well.

The difficulty will be in changing the current mentality, which is focused largely on differentiation by price and service, rather than on technology, according to one industry expert. It will be difficult to increase R&D investments while conditions remain challenging, with sale prices declining, raw material prices increasing, and the continuing movement of business offshore. Some also question the resolve of formulators that offer both liquid and powder products to grow the powder market, since it could lead to erosion of their liquid business. It may be up to smaller powder coating producers to drive the market forward.

To maximize opportunities in emerging regions of the world—Asia, Southeast Asia, Eastern Europe, South America—the larger players in the market are establishing a presence near their customers. Both coatings formulators and resin suppliers have invested in numerous facilities in China in particular, but in other high growth regions as well. DSM, for example, is expanding its DSM Eternal Resins polyester powder coating resins in Kunshan, China, and is debottlenecking its powder resins production at its DSM Resins Far East plant in Taiwan. Akzo Nobel, Rohm and Haas, DuPont, and Sherwin-Williams have all made investments in growth regions, as have other major resin suppliers.

As the larger companies follow the supply chain distribution channels into emerging regions, opportunities are being created for smaller regional players. These companies are better able to serve local, small volume needs. Often, they can also provide customized products (multiple colors, special effects, etc.) in a minimal amount of time. Many in the industry believe that this type of service will become a required capability in the future.

JCT CoatingsTech spoke independently with several powder coatings formulators and resin suppliers about these issues. Their individual thoughts about the current condition of the market, the role of technology development, and possibilities for the future are presented below.

The powder coating manufacturers that participated in this survey include: Robert Pennekamp, vice president, finance with Interpon, Akzo Nobel’s powder coatings business; John K. Tomlinson, product manager for BASF Automotive OEM Coatings; Trena E. Benson, marketing manager with DuPont Powder Coatings USA; Thomas P. Frauman, global marketing director for Powder Coatings with Rohm and Haas Company; and Bob Cregg, market development director for Powder Coatings with Sherwin-Williams.

Resin suppliers that provided feedback include: Bruce Benda, director of global marketing for Powder Resins, and Thomas Faeske, Head of the Global Technical Group, Bayer MaterialScience; John Jacquin, TS&D manager, Powder

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Coatings News—America With Oxy Surface Specialties, Cindy Fuhl, senior manager—
Coatings with Johnson Polymer and Eric Duanwitz, technical manager of Coatings Innovations for Ritchie's, Inc.

The Way to Your Company Involved in the Powder Coatings Market?

Thomas P. Ballman, Rohm and Haas Vidal product manager, industrial coatings, represents a significant portion of the global coatings market. Powder coatings represent a superior solution for environmentally compliant application of factory-applied coatings. Today, with the global powder industry occupying only roughly 15% share of total industrial coatings, significant headroom exists for expansion of primary market demand driven from new technology that enables the replacement of solvent and waterborne liquid coating systems.

Robert Panyk, Akzo Nobel. Akzo Nobel is the largest coatings company in the world, and powder coatings is an important market segment for us. We see good opportunities for growth based on the efficiency, cost benefits, and positive environmental impact of powder coatings. Powder coatings are an environmentally friendly alternative to solvent-based products. It's great to be in a green business with so much potential.

Bob Gregg, Sherwin-Williams. Sherwin-Williams began offering powder coatings technologies several years ago as part of our strategy to offer a broad range of finishing solutions for our customers, particularly solutions that allow our customers to comply with increasingly stringent government regulations. Of course, because the market for powder coatings was the fastest-growing segment of the industrial coatings market, we identified it as an area of growth potential.

John K. Jollivette, BASF. Powder coatings represent an important market segment in North America for both automotive OEMs and their tier suppliers of parts. Powder coatings provide a unique combination of VOC-free coating on our customers that benefit from the environmental impact of their operations, and BASF's involvement in powder coatings today meets most of our customer needs.

Bruce Berth, Bayer MaterialScience. Participating in the powder coatings sector is a good fit with Bayer's strategy to offer value-added raw materials for the paint and coatings industry overall. We also place a strong emphasis on providing environmentally friendly products and powder coatings fit nicely with this aspect of our business as well.

Eric Duanwitz, Ritchie's. Serving the powder coating market is one of the major ways of growing our coating sales business in compli-
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other six second-tier players holding 15% share. Below these companies are some smaller regional players like Spartan, Corvus, Vega, Vencent, Nampa, Tex, Inter, UDL, and Ohio, and then the numerous small producers that make up the competitive fringe.

In emerging markets, it has been common for smaller players to achieve significant growth rates in the shadow of the larger producers by leveraging basic technology, speed, and low cost.

John K. Reimherr, BASF: The automotive, OEM, kitter, and wheels segments, as well as industrial coatings such as appliances and high-demand industry sectors, are high-growth industry segments. In the 1990s, some of the major OEM automotive companies converted their primer layers to powder coatings, driving the growth of powder in that market segment. The growth has since slowed due to the completion of the conversion process. Today, there are few "brown-field" locations remaining for conversion from liquid to powder; and, for the most part, only new facilities are adding to powder, driven by the OEM segment.

JCT: What has been the impact of the recent company acquisitions that have had a strong impact on the dynamics of the market?

John K. Reimherr, BASF: BASF's $475 million acquisition of Kolon Polymer is expected to be completed by July 2006. Through this transaction, BASF gains a much stronger position in water-based resin technology as well as a better position in the North American market. For our powder coatings business, the acquisition provides a "win" with the ability to expand its portfolio of products for existing customers and help enter into new markets.

Robert Ponzio, Akzo Nobel: There have been no significant Akzo Nobel acquisitions or mergers that have had a major impact on the market since 2000, when Akzo Nobel acquired the Techcolor coatings business. We believe the acquisition and merger activity will pick up again in the coming years. Akzo Nobel, for example, is actively pursuing a number of growth opportunities through acquisition.

Perry F. Byrnes, DuPont: We continue to see consolidations among new materials suppliers. The number of consolidations among powder producers is few. This creates a difficult market for attaining the level of scale that powder coating desires. Powder manufacturing is a niche with a small percentage of their overall offering and their business is very expensive to enter. All this adds to the complexities of this market. Over the years, powder applications on the one hand have driven prices lower and toward leveling. In the middle, the powder producers must seek out each and every opportunity to differentiate themselves.

JCT: Where are the growth regions of the world for powder coatings? What are the customer industry sectors with the highest demand?

Craig Knowles, Johnson Polymer: The major growth areas are in Eastern Europe and Asia, with growth rates double those in North America and Western Europe. Although there is little growth in the powder general metal market, the largest sector followed by appliance and watercooler. Thomas P. Fassone, Rohm and Haas: Today, roughly 40% of the world powder market is located in North America and Western Europe, and roughly 20% in emerging markets North America and Western Europe saw market decline in 2005, while there was strong market growth in Asia, Eastern Europe, and the Middle East. With continued migration of industrial production to lower cost countries, the future in North America and Western Europe will depend on end products requiring a high degree of customization, that are heavy and difficult to transport or where the coating appearance is a significant driver of differentiation and represents a significant portion of total manufacturing cost.

Robert Ponzio, Akzo Nobel: Asia, Eastern Europe, and South America are the most attractive new markets for growth, high now. Powder coatings are becoming a very strong alternative for traditional liquid coatings such as architectural, functional, piping and valve, and decorative.

Eric Domian, Reichhold: Turkey, Eastern Europe, China, and India are all growing at rates above the traditional Western European and North American markets. Companies within the general metal market such as steel tubing are still strong, while other sectors, such as appliance, continue to struggle.

JCT: What do you see as the key issues for the powder coatings market?

Eric Domian, Reichhold: There remains merely 50% oversupply in the coatings supplier base, which
implies a ripe condition for acquisition. This hasn’t happened because potential buyers do not see real differentiation between coating suppliers. The powder market, mirroring the overall coatings market, has relatively limited influence on the channel compared to the large feedstock producers and large retailers. Technology progress has slowed compared to that of liquid coatings, as the process of making coatings through melt mix extrusion has inherent limitations in raw material selection. Continued shifts of metal finishing to developing countries will challenge small and mid-size powder suppliers to stay in business.

John K. Tomlinson, BASF: Energy and raw material costs are always a concern, regardless of the coating technology in question. Resin suppliers need to find ways to maintain the quality of their products at reasonable prices. There is constant effort in the industry to drive cost from the process. If one technology develops a significant advantage, there will be a shift in the market to that technology. Currently, powder may have an advantage over liquid materials when waste handling and abatement costs are included in the analysis. However, the largest limitation of powder coatings is that they cannot be directly substituted in a liquid coatings line without substantial capital investment. This can slow the pace of conversion to the rate of replacement—that is, installing powder coatings only as current coating lines reach the end of their useful life.

Cindy Fruth, Johnson Polymer: The excess capacity is a major issue in the industry, driving prices downward. Although there have been many price increases over the past years, pricing is still well below that of 5–10 years ago. We continue to see more resin and powder coatings imported to the U.S., which is adding to the downward trend in pricing. Also, the conversion from solvent to powder has slowed. End users are looking at alternative chemistry, namely water and UV, to meet regulations, rather than powder. This is mainly driven by the costs associated with converting liquid lines to powder lines.

Thomas P. Krauman, Rohm and Haas: Today, powder coatings stand at a cross roads caught in the middle of the value chain, squeezed between two formidable opposing forces—petrochemicals and mass retail. No longer the “star” of their companies’ portfolio, major producers struggle to build competitive advantage and return the cost of capital to their shareholders. With both current customers and feedstock suppliers wielding more leverage than the powder formulator, manufacturers often respond to the raw material cost/selling price squeeze by slashing research, sales, and service budgets. These actions alone, without continued commitment to innovation and market expansion, may fuel a spiral of decline.

To compound the situation, powder formulators typically have high fixed costs driven from investments that were made 10 years ago. During this time it was assumed that powder coatings’ annual sales volume would continue to grow at double digit rates year after year. Business managers today find themselves caught between needing to raise prices and improve gross profits, while at the same time needing every ton of volume to cover fixed costs.

Trena F. Benson, DuPont: Currently there is more capacity than demand in this market. Approximately 10 powder producers manufacture almost 75% of the U.S. powder consumption. The remaining 60 or so producers, which produce the remaining 25%, may not be categorized as regional suppliers. As a result of the overcapacity, many of these regional suppliers have idle equipment which puts them in a position of offering quick turn-around on made-to-order materials. But, let’s face it... as a result of the current market conditions, many of these manufacturers are making some desperate and unsustainable offerings to the marketplace.

Robert Pennkamp, Akzo Nobel: Overcapacity is the key issue, and we believe this will correct itself in the future through consolidation of manufacturers. As far as technology is concerned, with powder coatings, we are bound only by our imagination. It is amazing to see the great advances that we have made with colors, effects, functionality, cure temperatures, etc., over the last five years. There is no doubt that the next five years will bring more technological breakthroughs. We do expect that raw material cost increases will continue to be a concern.

Bruce Benda, Bayer MaterialScience: Coupled with the overcapacities, Internet auctions first introduced by end users and then implemented by powder coating manufacturers for their raw material suppliers are driving the value out of the market and leading to premature commoditization. There is a downward pressure on prices as a result, which is being paralleled by increasing raw material prices. Suppliers to powder coating formulators are forced to increase efficiency and effectiveness—to do more with less—from a commercial, technological, and operational perspective.

Thomas Fuache, Bayer MaterialScience: We have witnessed an emerging trend of increasing demand for service in the powder coatings sector. Local supply is necessary to provide the necessary level of responsiveness and also to have the ability to provide products for specialized applications where customers are looking for special textures, gloss levels, effects, large color variations, etc. This trend is impacting both resin suppliers and coating producers.
Bob Gregg, Sherwin-Williams: While excess capacity is an issue for the industry overall, we prefer to focus on where there are market needs. We believe growth in powder coatings sales will come from targeting areas of unmet need, both in terms of technology and service: for example, in the ability to meet the needs of various customers with local supply of a broader range of colors, textures, gloss levels, and special effects.

Given these issues, what are the challenges and opportunities facing powder coating producers?

Thomas P. Frauman, Rohm and Haas: It is all about attacking that 80% of OEM product finishing that is not powder coated. This takes you into a variety of areas today not finished with powder coatings, including engineered woods and plastics. The road forward is clearly paved by technical innovation to create market expansion at the expense of liquid coatings, plating, laminates, etc.

Bruce Benda, Bayer MaterialScience: The reality is that overcapacity has stymied growth because the market does not have the technological improvements available for the part of the industrial coatings market not yet converted. Powder manufacturers must move away from competing so much against each other for each piece of business in the marketplace and work harder on developing the technology needed for converting more liquid applications to powder. We must get beyond the fact that we are pursuing the same customers by selling a coating. We provide an aesthetically pleasing and/or protective barrier for products and these formulations could be changed for greater usage in other markets.

Robert Pennikamp, Akzo Nobel: Powder coating producers must find new ways to differentiate powder technologies to prevent the market view of commoditization and to enhance the value that the various technologies provide to end users. Clearly our ability to continue to invest in developing new technologies is critical to continue to increase the value that powder technologies provide end users and to replace and/or surpass liquid coatings capabilities. We are also realizing an increase in specialty niche custom color requirements that are usually smaller batch requirements. We must be able to respond more quickly to this increasing demand. We will also need to continue to attract talented personnel to our industry to drive further success in this market.

Bob Gregg, Sherwin-Williams: Opportunities for increased use of powder coating technologies lie in areas where liquid coatings do not provide the necessary level of performance and compliance with increasingly stringent environmental regulations. It’s the performance-compliance combination that is key. Aluminum extrusion, government/military, and the heavy equipment industry are a few of the markets where these opportunities lie. The aluminum extrusion market, which in Europe almost exclusively employs powder coatings, also provides opportunities for the North American market. Until recently, the higher line speeds used in North America have precluded the application of powder coatings. Technology has been developed to overcome these issues, so we expect to see growth in this segment. There is also a push to educate architects and other end users and specifiers about the advantages the use of powder can offer manufacturers of windows, doors, and other extruded aluminum-based goods.

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E. R. Darnall, Headfield: The challenge is to marry advances in resin, the powder coating manufacturing process, and the coating application process, which implies cooperation among raw materials, coating and equipment suppliers to drive to achieve real significant breakthroughs.

Brian Norkal, Bayer MaterialScience: The challenge for the powder coatings industry is to find ways to invest time and money into innovation and new product development. Today, everyone must focus their efforts on portfolio management, and improving efficiency and effectiveness at the expense of future technology advancements.

Some opportunities for providing high-value added products do remain, though. For example, polyurethanes offer enhanced durability and weatherability, and appearance properties that for some applications provide necessary additional value, and therefore carry a higher price.

Cindy Fuhr, Betonem Polymer: The several steps, powder coating manufacturers have spent a tremendous amount of time developing lower cost formulations, and now a lot of time on R&D. Many suppliers are struggling to determine which developments are necessary for future growth. Although there are limits of work being done on lower temperature, cure and thinner films, the primary focus is still on making lower cost products. I believe that the entire industry is struggling with how to capture or recognize the value of powder coatings.

Thomas Facto, Bayer MaterialScience: As a supplier to the powder coatings market, we have noticed that formulations seem to be segmenting into different groups. Some powder producers have elected to streamline costs while others are taking the opposite approach and are investing to develop alternative technologies. One of those technologies is lower temperature urethane coatings. Bayer is developing new lower temperature thermoset urethane systems. Our goal is to change the paradigm regarding urethane powders, which traditionally require higher temperatures than either powder coatings. This offering will help our customers differentiate themselves from their competition as well.

Bud Flamm, Headfield: New development in acrylic resins and other curable resins are significant—respectively, the OEM automotive market and office furniture market. Should be impacted by those advancements. The growth of autotopcoats/decorative powder coatings in Europe is an excellent example of the impact of continuous technology development, and technology that can be applied to liquid-type film thicknesses with low energy costs requirements would allow powder coatings to penetrate into markets that were previously not seen as economically feasible for powders, e.g., heat-sensitive substrates and traditional metal finishing markets such as coil.

Robert Stensland, Alco Nobel: Fast change color booths, more efficient spray equipment, lower temperature cures, powder, and advanced powder coating technology that will enable a more uniform coating application are some of the new technologies that have already arrived or are on the horizon. New powder application targets have been launched and we are now competing against liquid thermo-polymers within the architectural market. We believe you will see powder coatings expanding beyond applications to aluminum and steel substrates, and will become much more prevalent in applications to wood and plastic. We also believe that metal will continue to progress at a very rapid pace. In all cases, these developments have not been growing areas in the market for powder coatings to replace the functionality of liquid coatings.

Harman N. Prashast, Nobel and Haim: Expanding powder coating’s share in several markets will depend heavily on enhancing powder formulations and application technology in the following areas:

- Lower cure temperatures
- Elevated appearance properties such as metallic finishes, texture and brighter metallics
- Smoothness than films and opaque coatings, improved application at higher rates on both simple and complex parts
- Better solutions for customers requiring numerous colors and frequent color changes

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ges where all the needs can be currently met with products such as the need for more functional coatings, specific performance characteristics, large part capacity, and coatings on heat sensitive substrates. All represent growth opportunities for the powder industry.

The industry continues to grow forward with advancements in application equipment. Coating technology and speed of color changes continue to move the market forward. These new designs increase efficiency, giving manufacturers and materials greater productivity benefits, which makes them more competitive in this global economy. Now a few high temperature coatings that withstand 1000°F products, meet AAMA 2007, for the architectural industry, TV, and powder for heat sensitive substrates and ultra low heat products for wood, MDF, and plastic. These technologies are still in the embryonic stage, if you will, and so they have only just begun to penetrate the market. We expect more opportunities in these areas on the horizon.

Where do you see the powder coatings market headed?

Bill Cogswell, Millennium Williams: We see customization and automation becoming increasingly important as more manufacturers and consumers focus on smaller part numbers, faster turn-around, and better. In the near term, we will see more growth in specialty powder coatings such as those that offer high performance and cost-effective solutions. We also expect that customers will want a wider variety of color choices, which is what we believe to be a significant advantage that will help to expand the market.

Robert Benoist, BASF: Powder usage makes up less than 20% of the industrial coatings market. The remaining 80% may fit into categories where all the needs can currently be met with products such as the need for more functional coatings, specific performance characteristics, large part capacity, and coatings on heat sensitive substrates. All represent growth opportunities for the powder industry.

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John K. Fedko, BASF: We expect that the use of powder coatings will continue to grow at a rate slightly faster than the total coatings market, thanks to new facilities being designed and built for powder. Color powder printers on the same automotive production line may prove to be a significant new source that will help to expand the market. Powder basecoat and clearcoat are not widely used today but this could change in the future as powder technology improves.

The powder market is continually evolving, with new technologies and materials being introduced to meet the needs of the ever-changing market. The demand for powder coatings is on the rise as more manufacturers and consumers focus on smaller part numbers, faster turn-around, and better. In the near term, we will see more growth in specialty powder coatings such as those that offer high performance and cost-effective solutions. We also expect that customers will want a wider variety of color choices, which is what we believe to be a significant advantage that will help to expand the market. Powder basecoat and clearcoat are not widely used today but this could change in the future as powder technology improves.

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manufacturing and application will enable penetration into liquid-dominated markets.

**JCT:** How will your company move in the future?

Tony G. Barnard, Enka Inc.

This is a great trend in the marketplace. Not only do we offer a marketable name, but we also offer innovations to meet the needs of our customers. Years of product and process development in the wet-end, many years of technical expertise.

We continue to work closely with our customers and their customers to meet market needs. We will continue to bring powerful and other industrial solutions to the marketplace. Along with new technologies and strategic partnerships with our customers, we will continue to develop powerful and other industrial solutions to the marketplace. We will continue to focus on providing them with unique solutions and useful equipment.

Powder is an aesthetically pleasing and functional business. The question is what is powder usage about. We want to produce new materials in unique and innovative ways.

Thomas A. Finlan, Rohm and Haas Inc.

Rohm and Haas will continue to build new commissions in the future and enable growth while delivering value to customers in new markets. We will continue to provide the world's largest acrylic resins business. We have multipurpose facilities that produce resins for both powder and liquid applications. We will continue to focus on building and growing our businesses in the future.

**JCT:** Are there any specific activities your company has recently engaged in that reflect your strategy?

Robert W. Strehler, Akzo Nobel

Akzo Nobel recently invested $2.5 million to build a new site to manufacture and sell cleaning products for our North American operations. We plan to make significant additional investments in water capacity and efficiency in our North American operations in the coming 18 months. Akzo Nobel will continue to focus on building and growing our business in the future.

Akzo Nobel has introduced a number of new coating technologies recently, such as particle management and advanced fluid handling technology that control the proper stabilization of the powder-applied silica-based products which provide a barrier coating and protection against corrosion to extreme on environmental conditions. And additional coatings which reach and exceed all levels of NEMA requirements (2003, 2004, 2005).

We also continue to increase our market share and to continue our innovation and development efforts and to improve our relationships with our customers.

Nicolaus Holzhal, Rohm and Haas

Rohm and Haas is following customers that are transitioning from conventional solventborne coatings to powder coatings and those that are moving to the developing regions of the globe. In addition, we are developing new materials and processes that can help these customers grow their businesses. Formulators and raw material suppliers need to understand that long-term sustainability will come through continued investment in R&D and technology. Cost reductions can only solve part of the problem.
Thomas P. Fruscione, Rohm and Haas: Last year, Rohm and Haas opened its first plant in Quinpu, China, which is near Shanghai. This plant employs world class production equipment and techniques and is focused on serving the needs of our multinational customers in the OEM premium segment. The Quinpu plant provides a shorter supply chain and higher levels of support for our customers. As part of this project, Rohm and Haas significantly increased laboratory and formulation resources. Currently, we are opening an additional laboratory and customer support site in south China that will support this capability and provide our customers with even more responsive color matching and service. It is our plan to expand from this base, leveraging our strengths in technology development to deliver value to both the OEM premium and volume segments. No doubt, this will involve additional investments over the next few years.

With regard to product development, Rohm and Haas is currently leveraging the broader technology capabilities of the organization as well as relationships with select key industry partners to develop next generation technologies for step-out growth. The technology thrusts of the company include enhanced cost efficiency for current powder applications; opening new applications for powder coatings that have heretofore finished with a competing technology; and changing the fundamentals of powder manufacturing—an example made clear and how they are made.

One example of a new technology from Rohm and Haas is in our High Yield (HY) chemistry. Rohm and Haas Powder Coatings has supplied HY outdoor durable powders to the industry for over eight years and will introduce a new generation of this technology later this year. Our HY product family offers superior fast pass transfer efficiency and application properties allowing customers greater yield (i.e., coated parts per kilo). Coupled with our applications expertise and field technical support, the third generation HY chemistry should allow metal finishes in the best of both worlds: superior coating performance at the lowest applied cost.

Furthermore, the industry can expect to see Rohm and Haas significantly ramp-up promotion of products that are developed and sold today in one region across our entire global footprint. In other words, expect many of the specialty products we currently sell almost exclusively in Europe or North America to appear in targeted campaigns anywhere we do business.

Tom B. Cuntz, DuPont: DuPont Powder Coatings Americas completed an acquisition in Mexico last year. We’ve extended our business into South America and will be meeting into the Canadian market this year. Opportunities will continue to increase in Asia, Eastern Europe, and the Middle East. We have introduced a number of specialty flammables for our customers and
plan to make some of them available on our new color card this fall. We also provide a line of high-temperature-resistant coatings for the fireplace and grill markets. We have many things in the works and, as I am sure you will understand, we need to protect our intellectual properties. However, be assured that we are committed to driving innovation in this marketplace and are making huge investments to drive powder into the new frontier.

Bob Creyts, Sherwin-Williams: Our strategy is to provide powder coatings to customers in various niche markets we choose to serve, such as the market for off-road and heavy equipment, where we have invested a significant amount of resources to develop technologies that provide higher performance at thinner film builds to reduce cure time for customers in this market. We also have invested in developing super-durable powder coatings for the metal and building products industry and for the off-road and heavy equipment industry. These efforts demonstrate our strategy to focus on markets where we believe we can provide product technology and service advantages that differentiate us from our competitors. In China, we have set up our new plant to provide the same formulations and quality that we offer here, extending the same strategy that has worked in North America to the Asia Pacific.

John Jacquin, Cytec: In mid-2005, Cytec Surface Specialties completed the renovation of its powder coatings application lab in Simi Valley, CA. With all of our resources now in one location, we have much more flexibility and have enhanced our applications support, reduced commercialization time, and improved overall safety.

With regard to new product development, Cytec is focusing on innovative powder coating technologies such as REHCOAT® super-durable resins for exterior applications, semi-crystalline polycyanates, resins for clearcoat and matte finishes, and UV-cured systems, including our URECOAT® unsaturated resins.

Eric Dormain, Reichhold: Reichhold and Prosim have jointly formed Reichhold Turkey, which will market product coating resins (and unsaturated polyester for composites) in the Turkish market. Prosim has been involved in selling Reichhold products since 1999. Reichhold Turkey has signed a manufacturing agreement with Ege Kimya to toll manufacture these products. Ege Kimya will upgrade their resin manufacturing plant in Adapazari, Turkey, to manufacture state-of-the-art Reichhold products.

Our introduction of Fine-Clad M-8230 hydroxylated super-durable polyester has generated significant interest in the wheel coatings market. Urethane coatings formulated with Fine-Clad M-8230 have outstanding flow and film uniformity, corrosion resistance—performance comparable to acrylic powders at significantly lower formula cost.

Bruce Benita, Bayer MaterialScience: Bayer offers its Rucolac® polyester resins, Crelan® urethane crosslinkers, and Cleart® catalysts to the powder coatings market. We are currently developing lower temperature curing polyester/wc thermoset resins and are engaged in discussions with customers about how the technology can be designed to meet their specific needs.

Cindy Fruth, Johnson Polymer: As noted earlier, JohnsonDiversey has agreed to divest its Johnson Polymer business to BASF so that the company can focus on its core business in the commercial cleaning and hygiene market. The operations of Johnson Polymer will be integrated into BASF's Performance Chemicals Division, which produces a wide range of specialty chemicals. We are excited at the prospect of being part of a world-class organization that understands the chemical industry and is willing to invest in the growth of our business.

On the product side, Johnson Polymer continues to develop new acrylic powder resins with more desirable properties. One of the differences with acrylic technology is that the cure occurs at lower temperatures, due to the higher melt viscosity of the acrylics. JONCRYL 825, a carboxylic functional resin, was developed and introduced for improved process capability. The softening point is 20° lower than the standard product, allowing for better incorporation during extrusion.