



DuPont Press Kit

SEMICON WEST 2008
SAN FRANCISCO, CALIFORNIA

Dynamic Science for Semiconductors

DuPont connects science and technology from across the company to offer one of the broadest portfolios of innovative materials and advanced process expertise available in the semiconductor industry. Working together and in sync with our customers globally, we're applying DuPont science and technology to bring highly engineered material solutions to semiconductor fabrication, manufacturing and packaging.



The miracles of science™



DuPont Semiconductor Materials Overview

Materials solutions engineered to meet
industry challenges

By leveraging DuPont materials science, applications know-how, manufacturing expertise and global market access, DuPont delivers timely, cost-effective and innovative solutions to meet the technology roadmap requirements of IC fabricators, leading-edge device manufacturers, and OEMs.

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For downloadable digital media files and images, or for more information on our entire portfolio of materials and technologies shown this year at SEMICON West, please visit: <http://electronics.dupont.com>.

Interviews

To arrange for an interview or to receive further information, please stop by our booth #1807 at SEMICON West, or contact:

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SEMICON West 2008 Highlights

- Featured for the first time at Semicon are new DuPont Hybrid Membrane Technology applications for HVAC and Liquid Filtration that support the demanding needs of semiconductor manufacturing operations.
- DuPont is featuring its newest co-designed products – DuPont™ WBR2000 dry film photoresist material for advanced semiconductor packaging applications, and DuPont™ EKC162™ photoresist removers, which together provide a step change in fine pitch bump formation and clean resist removal to meet the most challenging wafer level and flip chip bumping requirements. These technologies, together with the HD MicroSystems line of redistribution dielectrics, provide a tested and proven integrated solution for area array package requirements, whether stencil printed, plated, pillared or C4 applied. It's a powerful combination of new products, and a great example of the combined strength of DuPont science. Press release is enclosed.
- DuPont Performance Elastomers is introducing new Kalrez® 8900 perfluoroelastomer parts specifically designed for semiconductor thermal processes. Kalrez® 8900 parts demonstrate unusually long life in higher temperature semiconductor manufacturing processes to help cut costly downtime and reduce cost of ownership. Press release is enclosed.
- DuPont Performance Elastomers is also featuring an important new case study, illustrating how Spansion Inc. Fab 25 in Austin, Texas, was able to create a step change in its preventative maintenance (PM) schedule that increased productivity and reduced the cost of ownership in the fab, through the use of Kalrez® products. Press release is enclosed.
- DuPont EKC Technology will be featured as part of the SEMICON West Technology Innovation Showcase, in the North Hall, with a TechXPOT presentation on Tuesday, July 15 at 12:30 pm. The TechXPOT will be focused on challenges in device scaling. David Maloney, R&D Manager, DuPont EKC Technology, will present information on advanced processes and materials for new devices, specifically related to cleaning challenges in back end of line (BEOL) hard mask integration. Media Advisory is enclosed.



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DuPont EKC Technology Introduces New EKC162™ Photoresist Remover for Advanced Semiconductor Packaging

DANVILLE, Calif., July 10, 2008 —EKC Technology, part of DuPont Electronic Technologies, will introduce a new photoresist remover for Through Silicon Via (TSV) and Wafer Level Packaging (WLP) for copper pillar and solder bump applications at [SEMICON West](#) in San Francisco, July 15-17. This represents the latest innovation in the broad and growing portfolio of DuPont products for both semiconductor fabrication and packaging.

DuPont™ EKC162™ photoresist remover efficiently removes and dissolves DuPont dry films faster and at lower temperature than typical removers without attacking polyimide or metal layers. It has been formulated to enhance the removal of resists cleanly and efficiently, with full dissolution. DuPont™ EKC162™ photoresist remover also prevents redeposition while minimizing damage to metal conductors, bumps and redistribution layer dielectrics. EKC Technology's WLP photoresist removers are a tested and proven solution for area array packaging requirements whether stencil printed, plated, pillared or C4 applied.

“This innovation is consistent with our strategy to expand into adjacent semiconductor cleaning applications, including wafer bumping and through silicon via processes,” said Douglas Holmes, director of marketing, DuPont EKC Technology. “EKC is a leading provider of advanced cleaning solutions for back end of line interconnect resist and residue removal. In close cooperation with the DuPont [Advanced Packaging Lithography](#) team, EKC has applied its extensive experience to address the growing wafer level packaging segment.”

Other characteristics and benefits of DuPont™ EKC162™ photoresist remover include:

- Water rinseable, semi-aqueous solution;
- Co-designed with DuPont™ [WB Series Dry Film](#) to strip in half the time of competitive removers;
- Fully compatible with [HD MicroSystems™](#) PI and PBO redistribution dielectrics;
- Removes uncured HD-4000 series polyimide;
- Exhibits an extended bath life;
- Easy rework of partially stripped resist;
- Wet bench and spray tool compatible;
- POR (Process of Record) for high end logic devices in production.

For more information, please visit <http://wlpsolutions.dupont.com>.

EKC Technology is part of [DuPont Electronic Technologies](#), a leading supplier of electronic materials, including materials for the fabrication and packaging of semiconductors, materials for hybrid, rigid and flexible circuits, and materials for advanced displays.

DuPont is a science-based products and services company. Founded in 1802, DuPont puts science to work by creating sustainable solutions essential to a better, safer, healthier life for people everywhere. Operating in more than 70 countries, DuPont offers a wide range of innovative products and services for markets including agriculture and food; building and construction; communications; and transportation.

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7/10/08



Press Information

FOR IMMEDIATE RELEASE

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SPANSION ADOPTS DUPONT PERFORMANCE ELASTOMERS KALREZ® 9100 SEALS FOR INCREASED PRODUCTIVITY

DuPont Performance Elastomers (DPE) has successfully collaborated with Spansion Inc. Fab 25 in Austin, Texas, to evaluate a perfluoroelastomer O-ring product designed to help increase the uptime of semiconductor manufacturing equipment. The dramatic results enabled Spansion to create a step change in their preventative maintenance (PM) schedule that increased productivity and reduced the cost of ownership in the fab.

A recent problem occurred in the HDPCVD equipment at Fab 25 when process gases (SiH₄, O₂, He) and cleaning chemistries (NF₃ and O₂ plasma-two stage) created an aggressive process environment. High particle count and leaks from seal erosion and compression set caused seal issues in IMD and STI processes. The scheduled maintenance cycle was 90 days but premature sealing issues occurred within 30-60 days. The incumbent O-ring performance issues were related to mechanical as well as chemical attack with plasma erosion.

[Spansion](#) turned to DuPont Performance Elastomers for material options to produce longer seal life with reduced particle generation. Proprietary technology held the key to the solution with a combination of innovative filler and crosslinking technology. After reviewing specifications and test results, product modifications were made and Kalrez® 9100 parts were produced for trials against other competitive products. Kalrez® 9100 parts outperformed the competitive products under all conditions. As evident from the extensive evaluation run by Spansion, the resulting product exhibited significantly less seal erosion, reduced particle generation and better elastic recovery characteristics. The life expectancy of the critical parts improved.

Currently, Kalrez® 9100 continues to exceed the normal Spansion PM schedule by up to 6 times longer, extending the 30-day PM out to 180 days, depending upon the seal location. Increased equipment availability has increased the fab production capacity by greater than 20 percent, without additional equipment.

“Tremendous value was realized by running longer without planned maintenance shutdowns to replace critical seals,” reports Roger Sorum, equipment engineer at Spansion Fab 25. “Kalrez® 9100 parts performance is responsible for up to 6x improvement in availability.” Spansion has now expanded their adoption of Kalrez® 9100 parts to other tools in both thin films and dry etch with consistently favorable results.

Similar performance results for Kalrez® 9100 parts have been documented at:

- [IMEC](#), in the Silicon Process and Device Technology Division
- [Qimonda](#), where Kalrez® 9100 are now specified in 11 different seals in the DTE chamber seal kit and under consideration in four other locations.

To view specifics of the IMEC, Qimonda and Spansion evaluations and a database of over 50 real life success stories using Kalrez® perfluoroelastomer parts and Kalrez® 9100, visit www.kalrez.com/successstories.

About Spansion

Spansion is a leading flash memory solutions provider, dedicated to enabling, storing and protecting digital content in wireless, automotive, networking and consumer electronics applications. Spansion, previously a joint venture of AMD and Fujitsu, is the largest company in the world dedicated exclusively to designing, developing, manufacturing, marketing and selling Flash memory solutions. For more information, visit <http://www.spansion.com/>.

About DuPont Performance Elastomers

DuPont Performance Elastomers, a global supplier of specialty elastomers, is a wholly owned subsidiary of DuPont. The company is an industry leader in chloroelastomers and fluorinated elastomers, including Viton® fluoroelastomers and Kalrez® perfluoroelastomer parts. Kalrez® 9100 perfluoroelastomer parts are the latest amber translucent products developed by DuPont Performance Elastomers specifically for deposition process applications including, HDPCVD, PECVD and ALD. It also exhibits excellent performance in a number of etching and ashing/stripping process applications. For more information, visit <http://www.dupontelastomers.com>.

Note to Editors:

Please mention DuPont Performance Elastomers by its full name in the first reference. For all references thereafter, the company may be cited as DPE.

Reader enquiries should be directed to (US) 800-853-5515 or www.kalrez.com.

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Press Information

FOR IMMEDIATE RELEASE

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DUPONT PERFORMANCE ELASTOMERS TO INTRODUCE KALREZ® 8900 PARTS AT SEMICON WEST TO HELP INCREASE UPTIME AND IMPROVE WAFER YIELDS IN SEMICONDUCTOR THERMAL PROCESSES

DuPont Performance Elastomers will introduce Kalrez® 8900 perfluoroelastomer parts specifically designed for semiconductor thermal processes at Semicon West in San Francisco, July 15-17 at Booth 1807, South Hall. Kalrez® 8900 parts demonstrate longer seal life in higher temperature semiconductor manufacturing processes and help cut costly downtime and reduce cost of ownership.

For static and dynamic sealing applications in thermal processes such as oxidation, diffusion furnace, metal CVD, ALD and LPCVD, Kalrez® 8900 parts offer performance that surpasses typical industry maintenance standards for greater equipment uptime. A combination of properties effectively extends seal life, produces higher quality devices and greater yields. Kalrez® 8900 parts have:

- excellent thermal stability with maximum continuous service temperature of 325°C,
- very low outgassing properties,
- and excellent response to temperature cycling effects.

Kalrez® 8900 parts have been tested in a variety of demanding semiconductor process applications where temperatures routinely rise to above 300°C. Suggested applications include quartz tube seals, plenum seals, chamber seals and center ring seals.

“Kalrez® 8900 parts exhibit excellent retention of physical properties at elevated temperatures and have excellent mechanical strength,” says Steve Metaxas, DPE global

marketing manager. “They demonstrate a lower total outgassing rate versus competitive products and that helps reduce maintenance costs and allows for greater equipment uptime.”

DuPont Performance Elastomers is committed to the global semiconductor market. For more than 75 years, product development and technical expertise have helped introduce a broad product offering across major processes. Kalrez® 8900 parts for aggressive thermal environments complement the company’s offering of its dry-to-wet range of perfluoroelastomer parts – Kalrez® 9100, Kalrez® Sahara™ 8085, Kalrez® 8002, and Kalrez® 6375UP – successful performers in silicon wafer processing.

DuPont Performance Elastomers also has integrated manufacturing back to the polymer, enhancing quality control and product development. Kalrez® parts are manufactured in ISO 9000 registered facilities and are available in a wide variety of finished products from conventional seal shapes and bonded door seals to custom geometries. Kalrez® perfluoroelastomer parts are specially cleaned and double packaged in Class 100 workstations to significantly reduce the potential for contamination. Each item is individually packaged in a bar-coded bag for full traceability and is available as O-rings, sheets, and custom parts.

About DuPont Performance Elastomers

DuPont Performance Elastomers, a global supplier of specialty elastomers with headquarters in Wilmington, Del., is a wholly owned subsidiary of DuPont. The company is an industry leader in chloroelastomers and fluorinated elastomers, serving the automotive, chemical, petrochemical, semiconductor, food and pharmaceutical processing construction, general rubber and wire and cable industries.



Caption: Kalrez® 8900 perfluoroelastomer parts are specifically designed for semiconductor thermal applications

Note to Editors:

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Reader enquiries should be directed to (US) 800-853-5515 or www.dupontelastomers.com

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**DuPont Advanced Packaging Lithography Announces Commercial Availability of
WBR 2000 Series Films for Advanced Semiconductor Packaging**
Dry Film Photoresist Enables Cost, Productivity and Environmental Benefits

RESEARCH TRIANGLE PARK, NC., Mar. 4, 2008 – DuPont Advanced Packaging Lithography, part of DuPont Electronic Technologies, has announced the full commercialization of DuPont™ WBR 2000 Series dry film photoresist material for advanced semiconductor packaging applications, including electroplated solder, photostencil and copper pillar bumping. These newest DuPont dry film photoresists offer a lower overall cost of ownership, while addressing productivity and environmental challenges. Specifics on the use of DuPont™ WBR 2000 dry film photoresist for copper pillar metallization will be shared at the upcoming IMAPS Device Packaging Conference 2008 in Scottsdale, Ariz., March 18-20, 2008.

“Even the most advanced packaging designs can be produced cost effectively with DuPont™ WBR 2000, and the idea of a dry, solventless process is more appealing from an environmental standpoint,” said Mats J. Ehlin, global business manager for DuPont Advanced Packaging Lithography. “DuPont™ WBR 2000 has unique advantages, which is why it’s quickly gaining acceptance as a reliable, well-performing photoresist with a good range of use. DuPont is continuing to innovate with dry films as a superior alternative to liquid photoresists, and we’re pleased to see our customers achieve new heights using this film.”

DuPont™ WBR 2000 Series dry film photoresists deliver improved resolution, speed and consistent resist thickness across the wafer, as well as simpler processing and a reduced environmental footprint. Due to its high heat resistance, chemical compatibility and easy removal, WBR 2000 is well-suited for multi-purpose use, including in-via and mushroom plating, photostenciling and copper pillar metallization.

Unlike liquid resists, DuPont™ WBR 2000 Series dry film photoresists do not require drying of solvents, and can be applied in a single uniform layer across the entire wafer, with no edge bead. These properties enable higher productivity and yields, particularly for those manufacturers that

require thicker layers, which are more difficult to produce with liquid resists. Films are available in 50, 75, 100 and 120 micron thicknesses.

DuPont will be sharing technical details on a key WBR 2000 application at the IMAPS Device Packaging Conference 2008 at the Radisson Fort McDowell Resort in Scottsdale, Ariz., March 18-20, 2008, in a session titled, **“Optimization of the Dry Film Lithography Process for Copper Pillar Metallization Applications,”** scheduled March 19 at 7:30 am MST.

For more information on DuPont Advanced Packaging Lithography, DuPont™ WBR 2000 or to view abstracts of all the technical papers DuPont will present at the IMAPS Device Packaging Conference, please visit advpackaging.dupont.com.

DuPont Advanced Packaging Lithography is part of DuPont Electronic Technologies, a leading supplier of electronic materials, including materials for the fabrication and packaging of semiconductors, materials for rigid and flexible circuits, and materials for advanced displays.

DuPont is a science-based products and services company. Founded in 1802, DuPont puts science to work by creating sustainable solutions essential to a better, safer, healthier life for people everywhere. Operating in more than 70 countries, DuPont offers a wide range of innovative products and services for markets including agriculture and food; building and construction; communications; and transportation.

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DuPont Offerings

SEMICONDUCTOR FABRICATION MATERIALS

Lithography - Lithography is the defining technology for advanced semiconductor manufacture, and critical lithographic performance is largely dependent upon the quality of the polymers in the chosen photoresist. Our electronic grade polymers are produced under stringently controlled conditions and are thoroughly tested to ensure the highest performance available for critical applications. Each product is typically tested for 12 metals, polydispersity, molecular weight and transparency. Each process is controlled through statistical monitoring so that batch to batch variation is held to a minimum. Our materials for lithography include: polyimide films for stress buffers, polymers for photoresist, polyimides as an interlayer dielectric, and planarization and gap fill materials.

Etch & Clean - DuPont semiconductor fabrication materials include wet clean and surface preparation solvents and removers, post clean surface treatments, dry chamber cleaning gases, and plasma etch solutions for etch and clean processes.

Deposition – DuPont deposition materials include chamber cleaning gases for fast, economic and low emission cleaning for CVD and PECVD tools; high performance sealing, delivering outstanding thermal stability, very low outgassing and excellent elastic recovery; and customer parts to provide ultra-high thermal resistance, excellent plasma and superior chemical resistance.

Chemical Mechanical Planarization (CMP) - DuPont offers CMP slurries for planarization and wafer polishing, and cleaning chemicals for post-CMP cleaning solutions for the CMP process.

SEMICONDUCTOR FABRICATION EQUIPMENT AND SUPPORT SYSTEMS

Components, Parts & Accessories - Semiconductor manufacturing involves aggressive chemicals and gases. To ensure safety and purity requirements, DuPont offers a broad range of materials to improve the manufacturing equipment performance.

Our materials include: gaskets, seals, o-rings, elastomers and resins, pipe, tubing, hose, flanges, connectors, couplings and plumbing fittings, and raw materials for custom components.

Infrastructure Materials - DuPont offers a wide range of products for cooling and protecting people and equipment in the manufacturing and fabrication processes – from ducting materials to etching and cleaning chemicals, from contamination control to waste disposal.

Support Materials - Materials to support semiconductor manufacturing are critical to the overall performance. As a science company, DuPont has developed several unique materials that can help improve the overall safety, efficiency, and cost of ownership for semiconductor operations. Our support material offerings include: cleanroom apparel and wipes; cleaning solutions and solvents; device

and wafer handling systems; clean agent fire extinguishants; laboratory apparatus and supplies; and lubricating oils and greases.

DuPont™ Hybrid Membrane Technology (HMT) - DuPont™ HMT applications for liquid filtration and HVAC support the demanding needs of semiconductor manufacturing operations. DuPont™ HMT in liquid filtration applications has a mean pore size of as little as 0.5 microns for better initial and sustained particle retention and offers high-efficiency liquid filtration at temperatures up to 135°C. The flow rate of DuPont™ HMT is 2-3 times greater than calendered meltblowns of similar filtration efficiency and thickness, which can significantly improve semiconductor manufacturing efficiency.

DuPont HVAC filters with DuPont™ HMT, provide low initial pressure drop, non-diminishing performance based on mechanical filtration and superior particle capture in the sub-micron range (0.3 -1.0) for improved air quality and energy savings in critical semiconductor manufacturing process. DuPont™ HMT is a boron-free synthetic media to help eliminate contamination in the production environment.

SEMICONDUCTOR PACKAGING MATERIALS

Advanced Semiconductor Packages - DuPont offers a growing portfolio of dielectric materials, laminates and microlithographic polymer films used in advanced chip-scale, wafer level and flip chip packages. Advanced packaging developments include low CTE microvia build up films, thinner non-woven reinforcements for low CTE laminates, permanent photodefinable dry films and embedded passive materials.

Integrated Wafer Level Packaging Solutions - DuPont is connecting science and technology from across the company to design integrated wafer level packaging solutions for both current and emerging wafer level packaging requirements. A great example is the new set of codesigned products:

- DuPont™ WBR2000 dry film photoresist and;
- DuPont™ EKC162™ photoresist removers

These products together provide a step change in fine pitch bump formation and clean resist removal to meet the most challenging wafer level and flip chip bumping requirements. These technologies, also combined with the HD MicroSystems line of redistribution dielectrics, provide a tested and proven integrated solution for area array package requirements, whether stencil printed, plated, pillared or C4 applied.

Key benefits of these integrated solutions include higher yields, increased reliability and lower cost of ownership.

Modules - Hermetic multichip modules are currently the standard method for packaging Integrated Circuits (ICs) requiring high reliability and performance. The need for hermetic packaging is becoming even more critical with increased circuit density and closer packing of bare ICs. DuPont is working with key OEM design engineers to understand the importance of materials in the designing of a robust module. We currently offer ceramic and organic material technologies to allow for the integration of active and passive components in packages for automotive, computer, commercial, telecommunications and military applications. Our technologies can provide tremendous benefits in terms of high performance and small size without sacrificing the high performance you might need.

Micro Electro Mechanical Systems (MEMS) - DuPont R&D and engineering resources continue to provide innovative ceramic and organic technologies to meet the growing demands of Micro Electro Mechanical Systems (MEMS) and Micro Systems Technology (MST) including: precise fine structures, hermetic, chemical resistance, and thermal management applications.

This chart provides a general overview of DuPont materials offered for both semiconductor fabrication and packaging processes.

DUPONT SEMICONDUCTOR FABRICATION & PACKAGING MATERIALS PRODUCT OFFERINGS & PROCESS STAGES	Lithography	Etch & Clean	Deposition	Planarization	Infrastructure	Packaging
DuPont EKC Technology removers	●	●		●		●
HD MicroSystems™ liquid polyimides & PBO	●					●
DuPont Electronic Polymers — photoresist & ARC polymers	●					
DuPont Air Products NanoMaterials				●		
DuPont Fluoroproducts						
Teflon® fluoropolymers						
high-purity fluid handling systems	●	●		●	●	
amorphous fluoropolymers						●
Zyron® electronic gases		●	●			
Vertrel® specialty fluids		●				
Vespel® parts & shapes		●	●	●	●	
DuPont Performance Elastomers — Kalrez® perfluoroelastomer parts	●	●	●		●	
DuPont FE clean agent fire extinguishants					●	
Tyvek® wafer interleaf					●	
Sontara® cleanroom wipes					●	
DuPont Personal Protection — protective apparel & accessories		●			●	
DuPont Advanced Packaging Lithography films						●
GreenTape™ low temperature co-fired ceramics						●
Interra™ embedded passive materials						●
Zenite® LCP resins						●



David B. Miller

Group Vice President, DuPont Electronic & Communication Technologies

David B. Miller is group vice president, DuPont Electronic & Communication Technologies. This growth platform includes DuPont Electronic Technologies, DuPont Fluoroproducts and DuPont Imaging Technologies. Mr. Miller joined DuPont in 1981.

Mr. Miller began his career with DuPont at the Savannah River Plant in Aiken, S.C., where he held several positions in engineering and manufacturing. He then moved into the DuPont Electronic Materials business where he held assignments in sales, marketing, and business management, including managing director of the Asia Pacific Region. He and his family lived in Tokyo, Japan, for several years during this assignment. Upon his return from Tokyo, Mr. Miller became a director in DuPont Investor Relations. He was named vice president and general manager, DuPont Electronic Technologies in January 2001. Mr. Miller assumed his present position in June 2007.

Mr. Miller is on the board of directors of Merrimac Industries Inc., a leader in the design and manufacture of RF Microwave components, assemblies and micro-multifunction modules serving the wireless telecommunications industry worldwide. He is also a member of the Semiconductor Equipment and Materials International (SEMI) North America Advisory Board, serving on the public policy subcommittee.

He has a B.S. in electrical engineering from the University of Virginia.



Timothy P. McCann

Vice President and General Manager, DuPont Electronic Technologies

Timothy P. McCann is vice president and general manager, DuPont Electronic Technologies. He assumed his current position in June 2007.

McCann joined DuPont in 1980, beginning his career as a technical representative for the Permasep® water treatment business. Since then he has held several managerial positions in marketing, product, supply chain and business management before becoming marketing director for DuPont Engineering Polymers in Europe.

Mr. McCann joined DuPont Fluoroproducts as global business director for Fluoropolymers in November 1999. In June 2000, he added responsibility for the Nafion® membranes and dispersions business and became global business director, DuPont Fluoropolymers. He then re-joined Engineering Polymers as global business director, High Productivity. In 2005, he became Engineering Polymers' global director - marketing sales and development, and regional director.

Born in 1957, Mr. McCann earned a B.S. degree in chemistry at Cornell University. He has a master's degree in business administration from the Wharton School at the University of Pennsylvania.



John E. Odom

Global Business Director, DuPont Semiconductor Fabrication Materials

John E. Odom is global business director, DuPont Semiconductor Fabrication Materials. In this role, he provides business leadership for DuPont EKC Technology, DuPont Electronic Polymers, and joint ventures DuPont Air Products NanoMaterials and HD MicroSystems. Additionally, he is responsible for DuPont's overall growth strategy for the semiconductor fabrication materials market. Odom is active in the semiconductor materials industry. He is currently chairman of the Chemicals and Gases Manufacturers Group of SEMI.

Mr. Odom has served as president, DuPont EKC Technology, a leading global supplier of process materials for semiconductor manufacturers, since 2003. He joined DuPont in 1982 and has over 25 years of experience in the electronic materials industry, serving in a variety of roles in R&D, manufacturing, sales, marketing, and general management. He received a B.S. degree in chemical engineering from Clemson University in 1982.



Jim Guo

President, DuPont EKC Technology

Jim Guo is president, DuPont EKC Technology. In this role, he continues to drive global growth initiatives for EKC. Guo has experience in sales, marketing, and business development. He began his career with DuPont in 1995 and his recent assignments include business director, DuPont EKC Technology, Asia Pacific; strategic planning manager for DuPont Electronic Technologies; and business director, DuPont Printed Circuit Materials, Asia Pacific.

Mr. Guo graduated from the National Taiwan University, and received an M.S. in chemical engineering at Pennsylvania State University and an MBA from the University of Pittsburgh. He is based in California.



David J. Maloney

R&D Manager, DuPont EKC Technology

David J. Maloney has been with DuPont EKC Technology since 1996 in various positions including R&D, marketing, and applications engineering. He currently serves as R&D Manager, responsible for new product development and applications support.

Mr. Maloney has coauthored over 30 publications and patents. He received a B.S. in chemistry from McGill University in Montreal, a PhD in inorganic chemistry from Texas A&M University in College Station, Texas, and an MBA from the Haas School of Business, UC Berkeley.



Larry Pesek

Global Business Manager, DuPont Electronic Polymers

Larry Pesek has been the global business manager for DuPont Electronic Polymers since January of 2006. He joined DuPont in November of 2002 when DuPont acquired the business interests of ChemFirst, Inc.

Mr. Pesek was one of the founders of TriQuest, LP in 1998 which is the precursor business to Electronic Polymers. Prior to that time, he spent twenty years with Celanese Corporation in various manufacturing, R&D, and engineering positions.

Mr. Pesek obtained his B.S. degree in chemical engineering from Texas A&M University in 1978.



Miguel A. Cardona

Semiconductor Market Manager, North America

Miguel A. Cardona joined DuPont in December 1975. Since that time, he has held several positions throughout DuPont, including technology management, sales management, market development and operations. Currently, he is responsible for sales and marketing for DuPont Teflon®-branded fluoropolymers to the semiconductor industry in North America.

Mr. Cardona is a member of the Society of the Plastics Industry. He also won the SEMI DuPont Corporate Marketing Excellence Award in 2001. He has an undergraduate degree in chemical engineering from the University of Florida



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