

Poly Village

PolyMirae Magazine
2020 New year Vol.44



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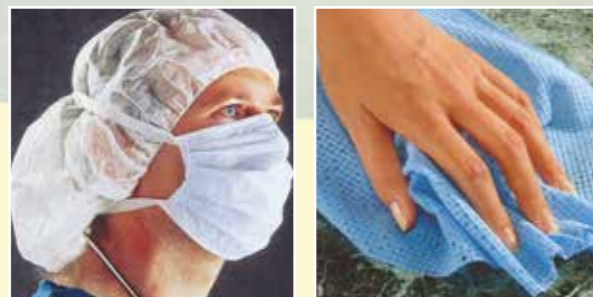
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Metocene MF650W, MF650X, MF650Y

**Metocene MF650W, MF650X, MF650Y,
The Innovation For Non-Woven Application**



Find your competitiveness with Metocene products

Metocene MF650W, MF650X, MF650Y open new development opportunities in Non-woven industry with clean processing ability, excellent tenacity, and the lower processing temperature

Dear Business Partners, dear Employees,

I would like to extend first of all my best wishes to you and to your families for the Solar and the Lunar New Years. As we start the New Year, I would like to thank all of you, for your passion and dedication.

It has been another very challenging year in the petrochemical industry.

PolyMirae has first of all recorded another outstanding safety record, we reached in fact in August a period of 2700 days without a recordable accident. This is a great achievement and we all shall be very proud of this. We are looking forward, also in 2020, to maintaining our workplace and our behaviors safe.

On the market side, we have continued to focus on our differentiation strategy. We have further expanded our business, both domestically as well overseas. We have recorded in October best-ever monthly results, both for our domestic sales as well for our total specialty sales.

Our new joint venture, Ulsan PP Company ("UPP"), has organized recently a very successful groundbreaking ceremony and I am very pleased to confirm you that

construction work for the new PP plant is progressing on schedule and on budget. The new plant will have a production capacity of 400 KTA and will use the latest generation Spheripol technology. We expect UPP, as of today, to be able to start-up commercially the new line in May 2021.

Our customers, our suppliers and our service providers share with us the same ambitions for the future. We have awarded this year eight suppliers and service providers, during our Supplier Award Ceremony in November, recognizing the quality of their products and services, their contribution to the company's innovation and growth projects, their strong partnership along the last few years.

We have been also welcoming new staff to PolyMirae, in fact we have been selecting and recruiting 30 new young talents for our teams, both in Seoul and in Yeosu, in the last three years. This is also very important to build our future. Our vision is indeed to continue to be the most admired company in our industry in Asia.

I wish you and your family's health, happiness and success in the New Year.

January, 2020

Yours sincerely,
Martino Gabellich
President and CEO



In addition to changes in the external environment such as inter-industry trade borders, global competition, US-China trade war, and the Fourth Industrial Revolution, there are also significant changes within the company. This involves different generations working today in the same organization. In most workplaces, Baby Boomers, Generation X, and Generation Y (Millenials) are working together, and Generation Z is about to enter the business society. Different generations with different values, depending on the environment and background, have been working together, and the conflicts between generations in the workplace and desire for reconciliation have been naturally growing in all companies. According to the latest data published through the job site 'Saramin', 8 out of 10 workers actually suffer from generation differences in their workplaces.



SH Jung, HR-ER

Usually, the generations born from the early 1980s to the early 2000s are also known as Millennials, or Generation Y. South Korea's Generation Y consists of about 14.9 million people (as of 2018), accounting for about 29% of the total population. Generation Y has a more individualistic attitude than older generations, thinks more about the value and meaning of work than monetary compensation, and is more familiar with two-way horizontal and free communication than vertical communication. It is also known for its ability to do multiple tasks at the same time and to value work and life balance.

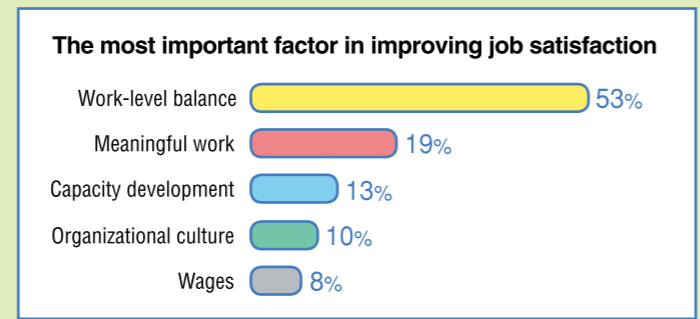


Figure 1. Investigating the factors that are considered most important to increase the satisfaction of PolyMirae work life

Generation Y accounts for about 38% of employees (61 out of 162) in PolyMirae and Generation Y will become the company's major constituent along with the retirement of the Baby Boomer generation by 2025. This year PolyMirae HR team conducted a personal interview with a total of 31 Millennials to identify the key factors to improve their job satisfaction.

Similar to the statistics of other companies published through the press, the Generation Y's key priorities were derived in the following order: Work-level balance> Meaningful Work> Personal Career

For Unity in the Workplace



Development.

The key findings of the survey were shared with management and team leaders. Several discussions were undertaken to improve the communication among generations in the workplace. A set of new initiatives has been launched, as improved mentoring systems for new employees, communication time between CEO and Generation Y, company workshops as a matter of unity among generations, leadership training for understanding Millennials for team leaders. The conflict between generations in the workplace is a natural phenomenon because of the different ways, cultures and environments that they have lived. I would like to introduce now some ideas to overcome the conflicts that come from generational differences.

1. Recognize the differences

Workers in the past used the concept of lifelong work for granted, and often considered work performance more important than personal life. However, when we talk with the Y generation, they think of the company's life and work performance as a part of just living a happy life. It is dangerous for us now to see these differences as problems with incorrect answers. Since the background and environment that they have lived are different, it should be understood that it is a phenomenon that occurs naturally. Even if there is something that cannot be understood, communicating with a mind that recognizes the difference between each other will be the first step in narrowing the gap between generations.

2. Breaking down walls of communication

Mutual and healthy communication is essential in alleviating generational differences through knowledge sharing and experience. However, it is not enough to just make a conference or talk. Rather, indiscriminately expanding meetings and other discussions could create undesired additional workload. According to some reports, "the lectures of the bosses with no content", "the disciplinary-style meeting", and "the coercive meeting with a unilateral atmosphere of command" were regarded as the worst forms of meeting. What matters is the method rather than the frequency of communication. Most inter-generational conflicts in the workplace are associated with inter-class conflicts. In particular, conflicts between lower and upper levels may be more amplified when the organization's communication path is rigid, in addition to the basic differences between generations. Therefore, in order to break down the barriers of communication between the upper and lower ranks in the organization, the older generations of the upper ranks should abandon their authority and the younger generations must embrace this.

3. Harmonizing leadership and followership

Efforts to overcome generational differences are not the burden of either the older generation or the newer generation. First, older generations should understand the culture of the new generation rather than reject it, and develop leadership that transfers the right knowledge and experience in senior positions. Followership of Y generation is also important. Rather than being unconditionally critical of existing methods, they can see the core values that have led the organization, which must be accepted with an open mind. When the leadership of the old generation and the followership of the Y generation are harmonized, the generation gap will no longer be an organization's burden and will become a valuable asset.

Job attitude to reduce generational conflicts in the workplace



New employee attitude

The most important thing a new employee should have is 'a positive attitude'. Even if you don't agree with your boss's opinion 100%, you can be more convincing, if you first listen and then talk softly and confidently about your opinion. If you complain too often, it's more likely to be sentimentally confusing, and in the worst case, in the perspective of your senior, it may seem that you are the only one who's always complaining. If there is something in the business that you do not understand clearly, you should go through a process to properly check. Check the deadline first when starting a project, and then discuss the goals and background of the project.

Through appropriate middle-stage reports and gaining advice from your manager, you will be able to communicate effectively at work. Work can lead to the greatest development through experience. Ask many questions to seniors and the more answers you receive, the more experience and knowledge you will gain.

Intermediate manager's attitude

If you're an intermediary manager, it's a good idea to learn how to start a conversation with people below you. Proper praise not only encourages juniors, but also softens the atmosphere of conversation.

If you can sympathize with the praise, it would be better. Juniors are still lacking in experience, so they will miss things substantially. It would be a great help for juniors to present new perspectives in this area or to suggest solutions based on their experiences. As a coach, it is better to support them to take the lead. Moreover, rather than unilaterally directing their work, try to give clear guidelines instead. No matter how trivial a job, you can explain the background and goals of the job, and communicate in a way that will broaden their horizons to see the big picture. It may also motivate your juniors to work harder.

In summary, we can harmonize the leadership and follow-up of older and Millennial generations, encourage two-way open communication, understand the differences between generations and, if respected, reduce generational differences in the workplace and create a happy workplace culture.

Plastics are used so frequently in our modern society that they have become indispensable. One of the plastics, polypropylene (PP), is a light, environmentally-friendly, heat resistant, chemical resistant material, and is used in many industrial structural materials. Since PP is composed of carbon and hydrogen, is harmless to the environment and has a spiral structure, it can enable the production of large quantities of semi-crystalline solid material with a hydrophobic surface, which in turn can be used in a wide range of industries such as automobiles, food packaging, textiles and home appliances. For this reason, it is often applied in diverse fields and comes in contact with various media. In particular, the need for surface modification is raised when contacting with a hydrophilic medium. This article introduces the various methods of surface modification.

Surface modification to expand the use of PP

GY Ha, ADTSI

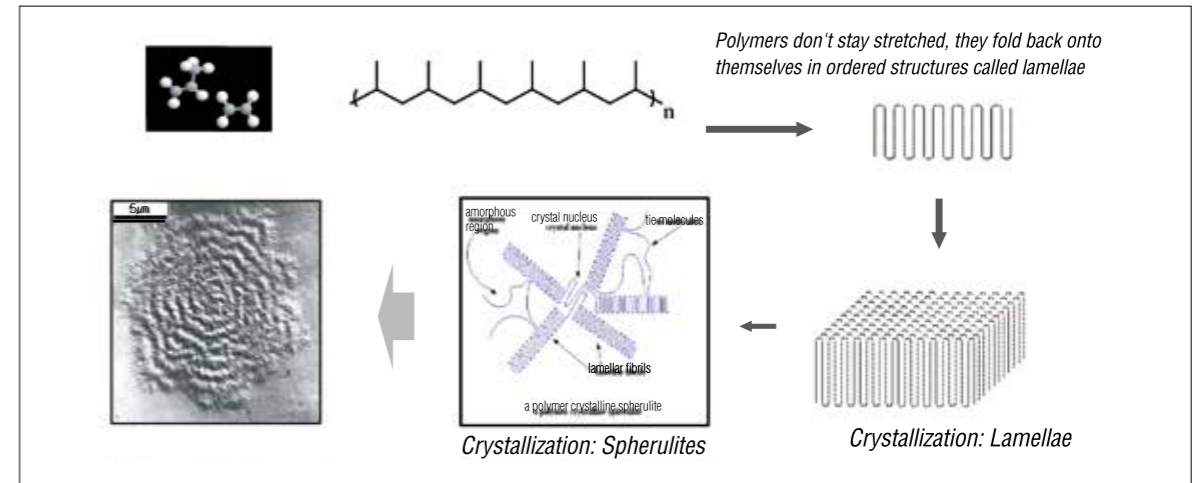


Figure 1. Surface characteristics of Hydrophobic phase of PP and semi-crystalline

Plastic molding injection parts such as automobiles, home appliances, and cosmetic containers often employ printing or paint processing to improve the appearance. Products produced by Virgin PP resin have a high level of hydrophobicity on the surface. In order to increase the quality of hydrophilic printing inks and paints when coating, the surface should be oxidized to modify the surface.

Many food packaging, sheets, and thin films for BOPP, CPP, Blown Film, etc. are processed after film forming and lamination. Here, a strong electric shock should be applied to the surface of a film or sheet, the surface oxidized to introduce polarity, and hydrophilic added to the hydrophobic surface to prevent separation from media such as paper, etc. Surface processing should be carried out to ensure good adhesion with these fields.

Similarly, in textiles, the surface is often modified for use as a wiper (WIPES) or filter media for nonwovens. Non-woven fabrics are widely used in industrial applications, such as coatings, and are widely available at a cost-effective level, increasing competitiveness in filter media, wipers, membranes, and microfibers. In particular, plasma processing has recently been used for surface modification and coating, which has recently been difficult with conventional thin films, and as such, it is possible to treat the filter media such as industrial or medical, and hydrophilic modification to the secondary battery separator, thereby contributing largely to the expansion of the application of PP

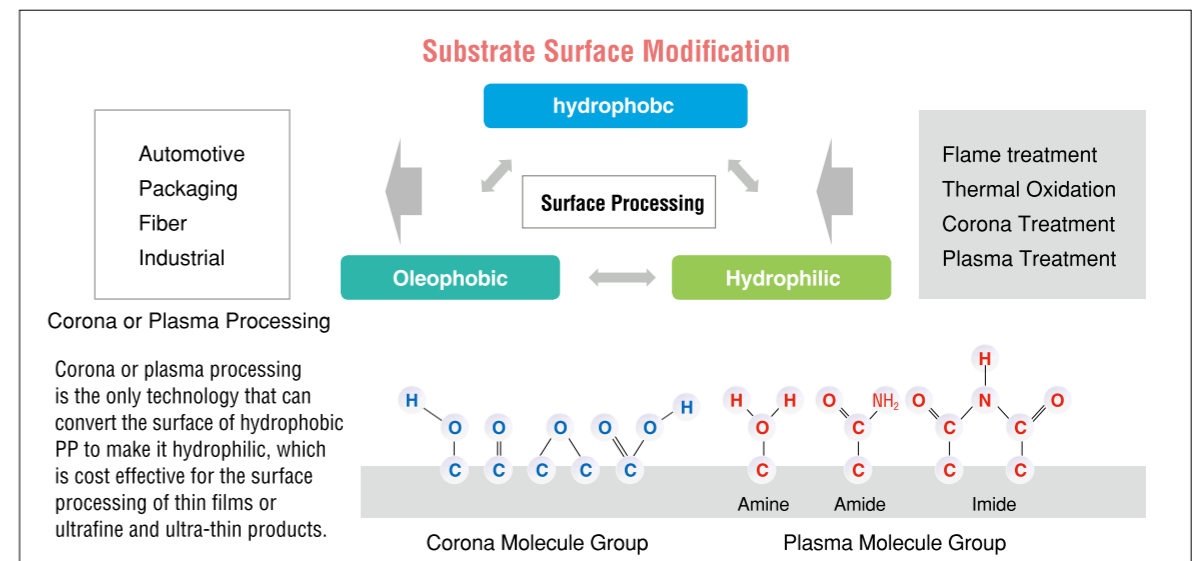
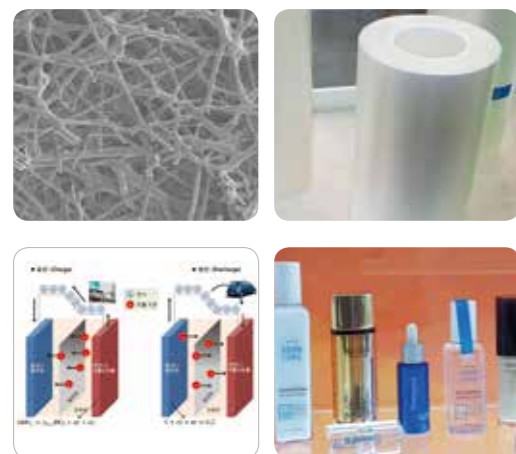


Figure 2. Generation of surface functional groups during corona and plasma processing

Corona and Plasma Processing on PP surface

Corona Processing	Corona Processing	Plasma action on polymer surface
Corona is the effect of applying energy to an uncontrolled atmosphere(air)	Plasma is the effect of applying energy to a controlled atmosphere(gas-mix)	<ul style="list-style-type: none"> • Cleaning and removal of organic contamination • Oligomers Vaporization • Microetching, scission, crosslinking, grafting and functionalization • Increasing wettability
New uncontrolled molecular bonds are created both on the surface and in the atmosphere including ozone.	New controlled molecular bonds are grafted on the surface. New chemical surface is achieved without ozone.	
The effect is a dissociation of atoms and molecules, creating positive and negative charged ions or molecule-ions.		

Examples of Surface Reforming-use of PP



Corona Processing and Plasma Processing of PP

	Corona Processing	Plasma Processing	Remarks
Device and Equipment			
Function and Characteristics	Continuous process possible High level of hydrophilic modification possible No limit to production width	High level of hydrophilic modification possible Pin-Holing Removal Processed as cold flame by controllable chemical No limit to the width of the workpiece	
Continuity of Surface	Decreased after about one week Influenced by ambient humidity.	Maintained for a long time	
Usage Environment	O2	N2 or Mix Air	
Ozone Creation	Ozone is generated	No ozone is produced	Affects smell
Quality of Material Transformation	Heat generation	No heat generation	Micro fiber Thin film processing
Surface Morphologies	Affected	Unaffected	
Work Environment	Serious smell	Closed environment	
Equipment	Good	High cost	

Plasma-Plus: Key Features

Construction	<ul style="list-style-type: none"> • Dual Hollow cathodes • Magnetically enhanced
Power	<ul style="list-style-type: none"> • AC 80 KHz, Quick arc detection and suppression system
Energy dose	<ul style="list-style-type: none"> • Up to 0.8 – 1 Kjoule/m2

In general, when the surface of PP is modified through corona and plasma processing, chemical reactions occur in the exposed areas on the surface; thus, the oligomer content of PP and the types of antioxidants that can form chromophores play a big role.

Figure 3 shows that *Metocene* HM2089, which has a significantly lower oligomer content and is a controlled antioxidant, is capable of high surface modification after corona processing and is less affected by ambient humidity.

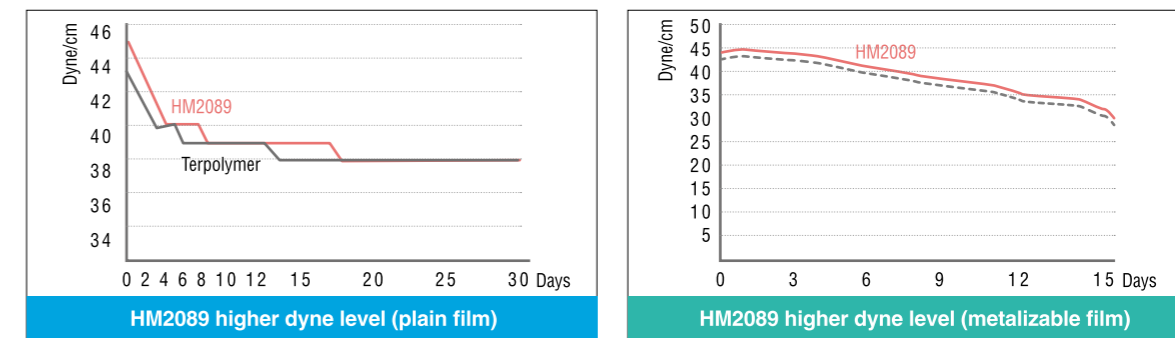


Figure 3. Characteristics of Ter-PP and *Metocene* HM2089 as surface modifiers

Normally, PP is used with a third type of interference device, hindered tertiary butyl alkyl phenol type, and these functional groups cause side reactions in the processing of corona or plasma. Formation of chromophore with a quinone structure gives color to film rolls (ROLL) and microfibers with a large surface area. Such considerations must be taken into account when making the product.

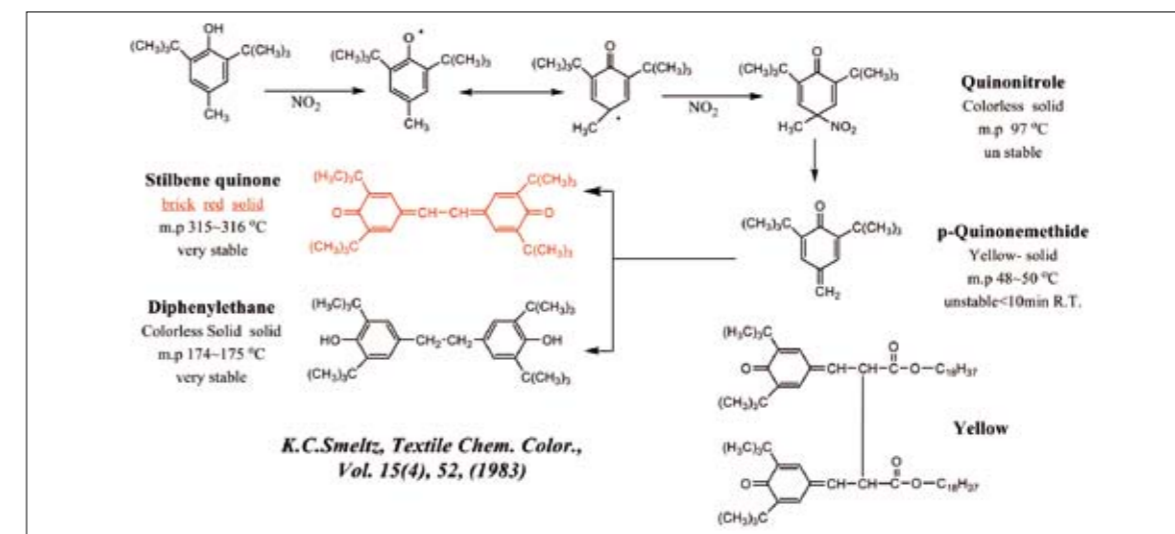


Figure 4. Chromophore formation mechanism of hindered tertiary butyl alkyl phenol type

In the future, there will be an increasing number of cases in which PP, with its many advantages, is applied to specific applications, along with the requirements for surface modification through surface processing. For the surface modification of these PPs, comprehensive techniques for raw material composition and additive systemization, corona and plasma processing should be considered. Plasma processing is particularly important for surface modification that overcomes the limitations of PP, especially for industrial special films such as packaging materials applied with multilayer films, separators for secondary batteries, the development of applications for various microfibers, and reforming coating of filter media when applied as filter media. With the development of convergence technology, PP is also expected to develop new areas of application and increase its potential scope of application.



Ulsan PP Plant Groundbreaking Ceremony

On October 22th, 2019, the groundbreaking ceremony for the new Ulsan PP plant, a joint venture between PolyMirae and SK Advanced, was held in Hwangseong-dong, Nam-gu, Ulsan. The ceremony was attended by domestic and foreign VIPs such as Ulsan Mayor Song Cheol-ho, Ulsan City Council Chairman, Hwang Se-young, Ulsan Chamber of Commerce and Industry Chairman Jeon Young-do, PolyMirae President Martino Gabellich, Daelim Industrial Vice Chairman Kim Sang-woo, SK Gas President Yoon Byung-seok, SKA CEO CJ Kim, APC CEO Al Matrafi, LyondellBasell Senior Vice President Jean Gadbois. All celebrated the ceremony for Ulsan PP. This is very meaningful moment for Ulsan PP that has started on-site the construction of a 400,000 ton/year PP plant.



말티노 가벨리치 대표이사/사장



조셉 호이킨스 대표이사/사장



2019 Excellent Partner Supplier - Awards Ceremony

PolyMirae held its second 2019 Excellent Partner Awards ceremony on November 6, 2019, following a successful one in 2016. We selected eight suppliers that have provided high quality products and services to us for the past three years as outstanding partners after serious consideration. PolyMirae CEO Martino Gabellich delivered direct appreciation plaques to representatives of the eight outstanding partners, and all attendees had a great time with the luncheon. In addition, we hope to improve one another by enhancing the competitiveness of products and services through continuous partnership.





No-accident records reached 2700 days (9 times)

A New Benchmark - 2700 Days without an Accident

PolyMirae recorded on August 26, 2019, 2,700 days (9 times) without accidents. This is also related to the fact that the company successfully completed the turnaround in the Yongseong factory in May and June 2019 without accidents indeed, after achieving 2400 days (8 times) of zero accidents on October 30th, 2018. In addition for being proud of these results, PolyMirae's employees are getting well prepared for the turnaround planned at the Pyeongyeo plant, which is scheduled for 2020, our next upcoming challenge. The company must strive to create an accident-free workplace based on a daily safety culture.

JY Lim, HSE



Groundbreaking ceremony of UPP, a joint venture between PolyMirae and SKA

Ulsan PP Plant Groundbreaking Ceremony

On October 22th, 2019, the groundbreaking ceremony for the new Ulsan PP plant was held in Hwangseong-dong, Nam-gu, Ulsan. The ceremony was attended by domestic and foreign VIPs such as Ulsan Mayor Song Cheol-ho, Ulsan City Council Chairman, Hwang Se-young, Ulsan Chamber of Commerce and Industry Chairman Jeon Young-do, PolyMirae President Martino Gabellich, Daelim Industrial Vice Chairman Kim Sang-woo, SK Gas President Yoon Byung-seok, SKA CEO CJ Kim, APC CEO Al Matrafi, LyondellBasell Senior Vice President Jean Gadbois. Ulsan PP CEO Joseph Honkins said that "This is a very meaningful moment for Ulsan PP, and we want to make a positive contribution to the economy of Ulsan, including the new port of Ulsan, by increasing community employment and activating related businesses."

Ulsan PP, a joint venture between PolyMirae and SK Advanced, has started on-site the construction of a 400,000 ton/year PP plant.

SH Jung, HR-ER



A group of PolyMirae and LYB employees attending technical meetings

Technical Exchange Meeting with LYB

The company held an annual technical exchange meeting at LYB's R&D Center in Ferrara, Italy, from October 28th to November 1st. The company dispatched a business technical team, including the Director Ha GY, in charge of Innovation and ADTSI, and a production team from manufacturing. This meeting reviews the technical issues of new and existing products in 2019, and designs, features, and manufactures polymer structures for products expected to be developed in 2020 for automobiles, packaging materials, textiles, pipes, medical, and consumer products. The two parties shared broad opinions on methods, intellectual property rights, and experimental evaluation techniques. In particular, LYB's new generation of catalyst technologies, including the new generation of catalysts, were discussed in detail to explore new product development opportunities. Through this opportunity, LYB and PMC exchanged the latest information on LYB's new technology development status, and through this technology exchange, they gained the opportunity to find out how to support future innovation. The meeting discussed as well the development direction and progress of mechanical recycling in LYB.

GY Ha, ADTSI

10th anniversary for the production of Metocene

The company celebrated its 10th Metocene anniversary on November 17th, 2019. PolyMirae implemented the Metocene project in October 2009 and made on November 17th, 2009, the first production of Metocene products using LYB Metocene catalyst. Since the initial production, in the first period, there have been diverse issues and difficulties. However, as a result of the continuous efforts and improvement of the operations, and as well investments in the process equipment, a stable and high quality production for Metocene products has been finally secured.

In the future, PolyMirae will continue to lead the way in this space, developing and supplying globally the best Metocene products.

GJ Lee, Process/QA

Toray Advanced Materials and Technology Seminar

Last September 9th, PolyMirae staff visited the Toray Advanced Materials Plant No. 3 in Gumi, Gyeongbuk, and held a technology seminar to develop competitive products through technical exchange and cooperation between the two companies. Toray Advanced Materials is one of Asia's first spun bond companies to supply SMS, SMMS and composite fiber spun bonds. The conference was attended by PolyMirae Technology Team, Domestic Sales Team, Market Development Team, Toray Advanced Materials SB Technology Team and Textile Materials Research Institute. At the technical seminar, the technical team, including Director GY HA, the technical executive of the company, presented PP materials in textile applications. PolyMirae offer including the company's specialty products (soft spun bond, melt blown, Metocene, etc.) and its product portfolio were introduced. Later in the seminar, a questions and answers session was held. The two parties spent time discussing technology development trends and product development plans. The two companies completed the schedule by emphasizing the partnership to develop new products through continuous technical meetings.

GY Ha, ADTSI

K-Fair 2019 and Customer Visits in Europe and Turkey

PolyMirae attended K-Fair 2019, the world's largest international plastics and rubber industry fair, held in Düsseldorf, Germany from October 16th-23rd. K-Fair is an exhibition held in Germany every three years, and this year, focus topics have been recycled products, sustainable raw materials and resource-saving processes. The company had the opportunity to share with the customers the current market situation and expanded product portfolio offer during this exhibition. PolyMirae is proud to announce the significant success of its specialty products (Metocene, Melt blown, High-performance grades for compound & packaging, new grades for soft spun bond), all developed on the basis of the world's class technology of LYB and PMC first class product development and industrialization capabilities. The company diverse product portfolio attracted a substantial attention from customers. PMC then developed the basis for new sales agreements for specialty products through customer visits in Europe and Turkey, and attracted various new potential customers.

SH Kim, Market Development



Park Jong-Yoon and Lim Chae-Hwi attended VietnamPlas

VietnamPlas 2019

The company participated in VietnamPlas 2019, held in Ho Chi Minh City, Vietnam for three days October 3-6th, to meet customers from Vietnam and Southeast Asia and to promote the company product portfolio. Trends and advanced processing technologies were discussed. VietnamPlas is Vietnam's largest plastics exhibition, held in Ho Chi Minh City, where about 80% of Vietnam's plastic industry is gathered. The exhibition, held at the Saigon Exhibition & Convention Center, Vietnam's largest exhibition venue, is visited by companies from 10 countries including China, India, Iran, Italy, Korea, Malaysia, New Zealand, Singapore, Taiwan and Vietnam. At this exhibition, PMC participated for the first time, with the LYB Vietnam office, to understand and develop the rapidly changing Southeast Asian plastics market. In particular, the company has attracted a wide range of potential customers, and presented new products such as EP140R, a super impact copolymer product that can reduce POE content, EP5077, a high-flow and high-impact product, and Metocene PP for the automotive industry with low VOC.

JY Park, Market Development

BAP PMC Quarterly Meeting

Last August 30th, the LYB Guangzhou office organized a BAP PMC quarterly meeting. The conference, together with Basell Asia Pacific, aimed at reviewing current business conditions and discussing future market forecasts and future business directions. In this conference, considering the rapidly changing international market and the market characteristics by country and application, the major customers' business situation has been reviewed, to understand their business status and current needs, and to forecast future opportunities. Furthermore, the company has carefully reviewed the development status and supply of new products. Through this meeting, PMC expects with LYB support to help customers expand their market development and sales opportunities with a close supplier-customer relationship. Furthermore, the company will continue to implement diverse implementation plans and continuously update them to help maintain current customer portfolio and develop new ones.

HS Kim, Market Development



PMC Staff at K-Fair 2019



PMC Employees during a compliance review meeting

Confirmed compliance with comprehensive safety management regulations A- Grade Assessment

For one week from October 14th, the PolyMirae Yecheon Plant has been inspected and evaluated by the Korea Gas Safety Corporation (inspection and specific safety management regulations for PP#1 and PP#2).

As a result, following the PP#3 process in 2016 and the PP#4 process in 2017, the remaining PP # 1 process and PP#2 process received as well the A grade.

This is the result of all employees working together to build a safety culture. Moreover, the Yecheon plant employees have demonstrated a strong focus on safety operation and safety management during busy schedules.

Comprehensive safety management assessments are conducted by the Korea Gas Safety Corporation every four years to prevent major industrial accidents. The overall status of safety management is inspected not only by the system but also by the on-site safety management. Grade A is the highest grade and is given to only 10-20% of the companies evaluated.

TS Kim, HSE

Technical meeting with Asia Coperion Vice President

On October 28th, Benny Everaerts, Vice President of Coperion, and Deputy General Manager of ABCO, Coperion's Korean agent, visited PolyMirae. Coperion is the world's leading extruder supplier, and PolyMirae has Coperion for three of its four extruders. The extruder is one of the most important equipment in the PP manufacturing process, and the stable operation of the extruder is an essential element of the PP production process. In this meeting, when the extruder problem of production line 3 occurred last year, the company thanked Coperion for the quick supply of spare parts at the time to ensure the operation of the plant not being disrupted.

DB Ha, Process/QA



2019 Coperion Technology Update Seminar in Yeosu

Toray Advanced Materials visits Poly Mirae Plant

On August 12th, Toray visited the PolyMirae Yeosu plant.

On that day, the Toray Advanced Materials staff visited the PolyMirae Production Team, Automated Warehouse and DIC's Quality Assurance Team, LYB and had the opportunity to be exposed to PolyMirae's excellent operation indicators and seven years of continuous accident-free safety management. Toray are familiar with the stable supply of high quality products from PMC and expressed deep confidence in the supplier capabilities. Following the discussion on the development and supply of new products, the company concluded the schedule by emphasizing the cooperation of the two companies for their continued and stable business.

HS Lee, Process/QA

2019 Coperion Technology Update Yeosu Seminar

For two days on October 14th and 15th, Coperion held Seminars on products and technologies produced by companies belonging to the group. In this seminar, recent topics such as extruders, feeders, the Pneumatic Conveying System (PCS), technical changes, maintenance services, and new technology and successful projects were introduced. The seminar promoted the latest technology of Coperion, which has introduced new products through continuous research and development. Nine employees from headquarters in Germany and Singapore participated in the workshop.

PolyMirae plant engineers also actively participated, gaining technical knowledge and gaining insight into what they knew only in theory through video footage. The seminar is expected to help identify and improve the operation efficiency, problems and causes identification at the PMC Yeosu Plant, which uses a large number of Coperion equipment.

JG Jung, Process/QA

Visit to Japan Melt Blown Customers

For three days from October 7-9th, Team Leader Kim Hak-sang of Market Development Team, Assistant Manager Park Hong-joon, and Assistant Manager Park Se-young of Technical Team, visited Japan's global melt blown companies. The meeting was held to understand the current nonwoven market situation, business issues and customer needs in Japan. Japan's nonwoven market is the second largest in Asia, after China, the market is expanding due to high quality and increased overseas demand. PolyMirae melt blown products are differentiated products and have been recognized for their high quality. PMC visited this country once again to expand business opportunities by introducing new products and discussing future product development.

HOJ Park, Market Development

PolyMirae CEO's keynote speech at APRCC

Martino Gabellich, PolyMirae CEO gave a keynote speech at the 2019 Asia-Pacific Responsible Care (RC) Conference, held in Seoul on November 7 and 8th, 2019. The 2019 conference was hosted by the Korea RC Council.

"Since its inception, RC has been proposing a consistent and effective approach to address many of the problems the companies and the industry are confronted with, and has been instrumental in the development and continuous improvement of our industry culture.

I believe Responsible Care, as a voluntary and proactive initiative, can also help to achieve some of the UN Sustainable Development GOALS, for the benefit of all of us and of our next generations."

More than 250 industry members attended the meeting, over 30 speakers were invited, and a number of expert discussions were held.

YS Lee, Business & Asset Management



PolyMirae's Martino Gabellich's CEO keynote speech at APRCC 2019



2019 Excellent Partner Awards ceremony

2019 Excellent Partner Supplier - Awards Ceremony

PolyMirae held its second 2019 Excellent Partner Awards ceremony on November 6, 2019, following a successful one in 2016. In 2019, it expanded the prize target to the suppliers of all raw materials, additives, packaging materials, equipment and services. The company conveyed deep appreciation to the partner companies that enhance the company's competitiveness by continuously providing superior quality products and services through innovative improvement activities and cost competitiveness. In addition, the company expects to continue to maintain the highest level of partnerships in the future. PolyMirae CEO Martino Gabellich delivered direct appreciation plaques to representatives of the eight outstanding partners.

KS Song, Procurement

Town Hall Conference with LYB SVP Jean Gadbois

On October 24, LYB Senior Vice President Jean Gadbois held a town hall meeting for PolyMirae HO employees. In this meeting, Jean Gadbois put his focus on the safety of LYB's operations, and on sustainable growth, emissions reduction campaigns, and continuous efforts to recover and recycle plastic waste. He also talked about the planned construction of a pilot chemical recycling plant in Ferrara, investments in research and technology for mechanical recycling, and expansion of product portfolios using bio-feed stocks.

In addition, young employees were given practical and helpful advice on how to maintain a good work-life balance for a successful work experience, how to use mentors and how to strengthen their personal competencies.

SH Jung, HR•ER



CEO and Millennials free talk in Yeosu

Dialogue between CEO and Millennials

In November, CEO Martino Gabellich had a conversation session with PolyMirae Millennial, both at Yeosu site as well at the HO offices. Millennial put several questions and expressed their opinions. PMC CEO gave answers and his advice based on his personal experiences, with focus on the development of their career and on the vision of the future PolyMirae. He was very sincere in his responses. He also gave suggestions to all employees to consider a review of time-shift commuting, which was one of the main requirements, and gave diverse personal opinions on how improving work-life balance. The meeting has been followed by an informal dinner

SH Jung, HR-ER

2019 Headquarters Community Service – Sharing Kimchi with Love

The employees of PolyMirae headquarters held a volunteer activity of sharing kimchi on December 6th. This event was held to support the disadvantaged neighbors and to warm them up for the winter, and to share with neighbors a little warmth during difficult times.

All office employees joined the activity and over 700kgs of kimchi were finally made by PolyMirae staff. The kimchi has been then delivered to the elderly living alone and disabled families living in Seoul.

MJ Yoo, HR-ER



Group photos with employees after completing the kimchi production service

2019 Long Service Employees Anniversary Dinner

In September, the 19th anniversary event was held at the headquarters and in Yeosu. At the event, long-term service awards were delivered to long-term service employees. In October, the company held a party dinner in Seoul and one in Yeosu inviting also the spouses, as a reward for long-term service. For Yeosu employees, a beautiful sunset was seen at Hidden Bay Lounge, while the office dinner was held at Alla Torre restaurant in Hongdae. CEO Martino Gabellich thanked the employees who had worked for the company for a long time and the spouses who had supported them.

HI Hwang, HR-ER



Yeosu plant long service employees and spouses group photo

PolyMirae Family Sports Day

Last October 12th, we held a family sports event at the Chonnam University, Yeosu Campus Gymnasium. On that day more than 150 people, including all employees and their families excluding of course some of the shift workers busy at the plant that day, attended together and were able to spend a fun time, harmonize and communicate with each other.



The sports competition started with the opening remarks by CEO Martino Gabellich, warming up and cheering a performance with a song. In the first half of the competition, several games were conducted, as Big Ball, standing balloon posts, wind grasping special commandos, spouse and children's game, Flag Stealth, Shoe Archery, Bubble Suit etc., where cooperation was possible. During the break, the people enjoyed a barbecue, rice cake, fruits and drinks and everyone had time to say hello and chat together. In the second half, diverse and meaningful games were played including Sports Dance, Hula Hoop Champion, Family Bobsleds, Air Ladder Relay, followed by a Team Tug of War. The day was very successful and all participants enjoyed it very much, with a One Team spirit.

HI Hwang, HR•ER



Warming-up time!



Take a guess which team won





선물이팡팡

Making kimjang with Love

The employees of PolyMirae headquarters held a volunteer activity of making kimchi on December 6th. This event was held to support the underprivileged neighbors and to warm them up for the winter, and to share with neighbors a warmth during difficult times.



Add kimchi seasoning and toss to coat well

They wore a hat, apron, gloves etc., and helped those who have never did kimjang before while cooperating. Despite the cold weather, all employees finished their service quickly and safely thanks to their collaboration, active support and cooperation for their neighbor's love. All office employees joined the activity and made over 700kgs of kimchi and kkakdugi. They were delivered to the underprivileged, including the elderly living alone and disabled families living in Seoul. PolyMirae expects neighbors to spend the winter warmly and will continue to realize social responsibility.

MJ Yoo, HR-ER



PolyMirae employees who are all set for kimjang



We are ready to make kimchi~!



We share a warmth through the gift of kimchi

This is the kimchi that we made with love



We are so happy that we can help the underprivileged

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