Korea Responsible Care Council

CONTENTS

Issue No.27
2011 가을호

제 언 •• My Opinion

RC해외정보 •• Overseas Information on RC

RC토픽 •• RC Topic

회원사 소식 •• News from members

KRCC 소식 •• KRCC News

A world dreams in chemistry

Perhaps it's natural for babies and children to be curious about the world and the things around them. The curiosity of elementary school students, however, overwhelms that of toddlers. Unable to control their unbridled energy, they never sit still, talk non-stop, run around, and make all sorts of loud noises. We'd like to believe that those behaviors are another expression of their innate curiosity.

Elementary school students are very fond of touching and operating things with their own hands. While they are at the concrete operational stage from the perspective of a teacher, it is also because that they take great pride in what they can do on their own. This is a new time of personal exploration in which they have just been freed from their previously passive state of always following instructions from their parents or teachers. Thus, there are many movements to teach children about learning and emotions through daily teaching aids, toys and play.

One day I found a fascinating ad that seemed to support some bakery association. "Eating bread at a young age will continue through adulthood." As I passed it by, I thought it was an interesting expression, the implication being that "culture is second nature." I think this idea is a good starting point for the challenge that we need to tackle today.

If you ask elementary school students about their dream jobs, you normally see that science related occupations and scientists ranked in the Top Five. When they become adults, however, it becomes highly unlikely that they would happily choose natural sciences and engineering as their occupation or specialization in higher education or career.

Although children relish the exploration of reality in elementary school, science gradually turns into something to be avoided as they grow up. The chemical industry is especially regarded as dangerous, seen as in opposition to environmentally-friendly trends, and the prime suspect of environmental pollution that threatens future society. I think now is an important time to offer

solutions to improve the image of the chemistry field.

Recently, the avoidance of natural sciences and engineering is so common. Science, especially the field of chemistry that is highly relevant to daily life, is no exception.

Some people say that chemical industry is "the last bastion of society, and there is nothing left in our daily lives without chemistry." Petrochemicals are the centerpiece of chemical industry, and I hope people will understand that chemical industry is not harmful to environment, but an indispensible part of our lives. I would like to gain the full support from the Korean through tremendous investment and efforts.

The statements I've made and the facts that support them are correct, but would you really think my argument is persuasive enough? Early this year, there was a massive explosion in a petrochemical company in Ulsan. Ulsan is a Mecca of the Korea petrochemical industry, having more people engaged in the petrochemical field than any other region, so it should be far more open and supportive to the chemical industry. Nevertheless, the explosion incident triggered an anxiety about the petrochemical industry that spread throughout that region and all its citizens.

Observing events like that, I think it is no longer possible to improve the image of chemistry through PR, persuasion, and investment.

As we have seen in the situations involving avian influenza and mad cow disease, we must be most worry about "accepting what is not actually fact as fact," a fear-based behavior that arises from vague anxiety.

Misunderstanding and conflict is the result of a lack of openness and trust. I want to ask if we have built up chemistry as a special field to be regarded as a very professional specialized industry that does not allow easy access.

There was a survey that revealed the first image of a chemist that pops up in elementary school students' minds is a person wearing glasses who experiments with flasks in a small room and didn't wash his hair for days.

If we don't correct this misconstrued image of chemistry in the minds of our youth, then it won't be easy to improve the negative image of chemistry and the chemical industry in our society.

If we could teach science and chemistry in a fun way, focusing on life chemistry that is easy,

fun, and highly relevant in our daily life, we can prevent children from having misconceptions about chemistry.

Fortunately, the KRCC is taking the lead in providing initiatives such as "Come! Fun World of Chemistry" to frequently offer opportunities where students can enjoy chemistry free from the context of academic study. Content such as "Chemical Industry Promotional Animation" allows students to correctly understand the chemistry field and improves the chemistry's image. These activities that establish the positive role of chemistry in our culture also achieve more constructive results.

There is a saying: you see as much as you know, and you feel as much as you know.

I think there should be more and more efforts that allow children to see the importance of chemistry from an early stage and to really feel the progress and prosperity that the chemical industry makes possible.

I am a Chemistry teacher who is happy to teach Chemistry

I am a chemistry teacher. I am a chemistry teacher who is happy to teach chemistry. I am happy because I don't need to wrestle with figures every day or suffer from strange vocabularies and awkward pronunciations. I don't need to run under the blazing sunlight or agonize over moral and ethical judgments. I'm a happy chemistry teacher, not so much because I'm avoiding several inconveniences, but because I'm in a position to teach various scientific principles that are hidden in our daily lives

The frequently asked question I hear as a teacher isn't, "Why did you become a teacher?' but "Why did you become a chemistry teacher?" The real reason can be traced all the way back to when I was in elementary. Although it was technically in Seoul, I lived in poverty in a poor hillside village. As the middle child of three boys and two girls, I had no choice but to live with my grandparents in Gongju, Chungnam, and do their errands. The elementary school I attended was also a small school belonging to a ri (type of administrative district) in the end of valley at the heart of the mountains, rather than belonging to a city. There was only one class for each grade, and there were only twenty-three students in my class among the total 133 students. Life in a rural elementary school is living with nature as it is. This was a time when people studied under lamplight without electricity, so I was free from worries and consideration. I just enjoyed nature and listened to its stories. Looking back, I can't deny that my habit of enjoying nature was shaped by living so close to nature. That attitude is still part of my core disposition, and my heart still fills with joy when I can relish the grasses, trees, flowers, sky, and streams.

Electricity was first introduced in our rural village when I was an elementary school 4th grader. I could not describe my surprise when I saw an electric lamp light up after just arranging some wires. After sunset, relying on a kerosene lamp, we were only just able to faintly recognize where things were placed, and it was all we could do to avoid kicking them. Watching light emanating

from a light bulb was so amazing: it was like I having my own tiny sun. It started to intrigue me how several lines of wires and a light bulb the size of a fist could do such a marvelous thing. Life close to nature subtly brings change as time and the seasons pass, but this small transformation caused by this new technology came to me as a thundering shock.

That short time when I could enjoy freedom and nature without worry came at an end too soon. As the pressure for full-fledged study started, my parents brought me back to Seoul. 5th grade in an elementary school! I was in tremendous shock for several days after my transfer. The most shocking thing was the size. My student number was 76, and there were 16 classes in 5th grade. Classes were divided into morning class and afternoon class, totaling 32 classes for each grade. I also really began to feel the effects of poverty—my parents did not even graduate from elementary school so they didn't have high incomes. This change in environment turned me from a proactive and energetic child into one who felt shrunken and isolated. I often found myself with time to ponder alone, dreaming about escaping my environment. I believed that I wanted to be a scientist. I wished to be a scientist who could make something new. It was the surprise from electricity and a light bulb I saw in our rural village house during 4th grade that inspired this wish.

I participated in the school science competition in 6th grade and happened to win first place, and this further spurred my motivation to become a scientist. In middle school, however, I didn't find any special momentum that brought me closer to my dream. I was just an ordinary student, and nothing special changed within me. As I entered high school, I finally started to wonder. "What kind of scientist shall I be? Which subject should I study? What do I need to prepare?" My ambition to be a scientist was always in the corner of my heart.

During that time, there was a teacher who took care of me in many ways as I suffered from economic difficulty. As I was grew more fond of that teacher and became closer to the chemistry teacher who was also my class teacher in my 2nd year in high school, my dream of becoming a scientist took a more realistic take: I would become a chemistry teacher.

What attracted me most to chemistry was salt (sodium chloride). Salt is very common, but I was fascinated by the world that let salt to be salt. Sodium (Na) is a group 1 alkali metal that has so great reactivity that it will lead to explosive combustion with water. Chloride gas (Cl_2) is an extremely toxic substance, and it was even used as poison gas in wars.

When these two substances meet, it generates fierce reactivity and leaves achromatic and

semi-transparent crystals: it becomes salt. Salt is an indispensable substance for most living creatures.

You may remember a childhood fairy tale about the sea. A greedy thief stole a millstone that made salt by turning. As he was creating salt in his boat, he made so much that his boat ended up sinking. The millstone, however, still kept churning out salt, and that is why the sea is salty. I thought that was a very interesting story. The world about which I was curious did not cease to generate new substances by the encounter between two substances of different properties. The question was, "Why should it be NaCl?" in the process of the encounter of two dangerous substances to generate very useful substances for all creatures. Why isn't it $NaCl_2$ or Na_2Cl?

I was able to find the answer as I looked at the structure of an atom. I learned there is some regularity in the world of the nucleus of an atom and electrons moving around it, as well as their characteristics. To form an octet by meeting metals and non-metals, a metal turns into a positive ion and a non-metal turns into a negative ion. I learned that all matter in the universe came into being by a range of bonding methods. An ionic bond is in perfect balance of giving and receiving in their exchange process. A covalence bond is complete in a so-called "mutually-beneficial method." A metallic bond happens when electrons escaping from an atom appropriately group positive ions.

There is no such thing as $NaCl_2$, but we have NaCl. There is no MgCl, but we have $MgCl_2$. Realizing the underlying principle behind why and how is an indescribable joy. Nothing in the world is generated without a reason. Nothing is just thrown out into the world as it is. Everything has its own reasons of being and its own existential values.

Sometimes, I feel like an evangelist preaching about why chemistry is inseparable from our lives and daily life in chemistry class at school. Well, it'd be better to describe myself as a scientific evangelist. I often ask my students to cultivate the inquisitive mind of a scientist. Among the things I've said was, "Don't be a poet!" Sometimes, a few students will raise an objection, asking, "Why not be a poet?" I then tell them the following.

"Think about it~ There's a poet watching TV on his couch. The sound is so low that he has to go to the TV to raise the volume. He comes back to his couch, and now he wants to change the TV channel. He had to go back to the TV to change channel, and he has to keep going back to the TV whenever he's not happy with something. Then, he would complain. 'Ah~ This small TV

is telling me how lazy I am by being so far away from me. The message is here is that I need to more diligently~."

Now, a person who recognizes this inconvenience and solves the problem on his would have a different attitude from the poet. After experiencing inconvenience several times, he would fashion a long bamboo stick to easily adjust the TV from his couch. Later, he might see someone trip over his the bamboo, and then he'd think of some device that wouldn't have that problem. Perhaps he would finally make a new device to adjust his TV through wire?

Eventually, assiduous thinking and efforts to overcome any inconvenience would lead to the creation of a remote controller that uses infrared light. The remote controller born from some people's diligent thinking and effort now allows billions of people around the world to freely adjust and control various devices. Isn't that touching? To play a role in transforming the world… So, I tell them not to be poets. I don't attempt to deny poets or belittle their roles. It just means that we should live with the attitude of actively solving problems, rather than just recognizing and contemplating on the problem.

Every morning brings about a new world. There was a time when mobile phones were called bricks, refrigerators, or weapons, but after a few years, they became miniature computers no bigger than a fist. As we sleep and wake up the next day, there are people who are continuously researching, investigating, testing, and overcoming their failures. These are the people who are changing the world. I hope my students can also play active roles in this positive transformation.

Chemistry is a particularly attractive study in this respect. It resembles our lives so much. If I cite some examples of how chemistry is like our lives, many students would snort at my metaphors the first time they hear them. I see those snorts, however, gradually change into smiles as class continues. When I finish my lecture and leave the class, I feel this warmth at the back of my head. This is the happiness of teaching.

Some may call this self-contentment or self-intoxication, but let me cite several examples. It is pretty easy to find an appropriate example when we explain the structure of an atom and the configuration of electrons. In the electron configuration by an orbital, one orbital allows only two electrons. In other words, if an orbital has two, no other electrons can enter. This is called the [Pauli Exclusion Principle]. People form a couple with two. If three people are involved, it turns into love triangle that causes severe conflicts. The characteristics of electrons are pretty similar to our own lives.

Furthermore, one orbital is not filled with the identical electrons. Two electrons with opposite spinning directions enter the one room. In this scenario, the relationship between man and woman is considered natural than between two men or two women.

[Hund's Rule], as I like to explain it, is the rule of a reserved bus seat. Though each reserved bus seat can seat two, people first take the empty seats individually, and then fill the seat later. When two or more electrons (if more than two people get into the bus) are filled in an orbital with an identical energy level (bus that departs at the same hour), the electrons are filled one by one so as to minimize the repelling power between electrons and later be coupled (sit one by one then make a couple)/

If you see the energy level of an orbital, two proverbs may automatically come to mind.

"Rome was not built in a day." And "Well-begun is half-done."

What do they mean? If you see the energy level of an orbital, the difference between a Kshell that has only one main proton and another Kshell with two main protons is greater than that of between Kshell with two main protons with infinite Kshell. If you jump one stage, then it is like you have already passed half of it.

If you start with one step, then you have already done many things.

If we look at a coordinate bond, you can observe an atom or molecule to unilaterally provide an unshared electron pair to get together: I think it would not be mere coincidence to think about a Chinese proverb about making a united effort to help other.

These metaphors might be somewhat farfetched or could lead to the misunderstanding of another concept. Still, if they help many students to easily understand the principles and to accept them more positively, then I think that's okay. I hope my students realize that chemistry is not something remote concept, but actually inseparable from our daily lives as we become involved in the process of curiously exploring our world and solving problems.

I am a chemistry teacher who is happy to teach the chemistry that is embedded deep in our lives.

South Africa Responsible Care Activities

Responsible Care Carbon Footprint Guideline Document

As a relatively intensive user of energy, the chemical industry contributes to the generation of greenhouse gases through its consumption of various energy sources in addition to the direct emissions from production processes. In line with Responsible Care principles, the chemical industry also recognizes its responsibility to contribute to efforts to mitigate climate change. The industry's goals in this regard are to reduce its own emissions by improving its processes and to encourage the use of chemical products that create a net emission reduction along the value chain. The transition to a low carbon, resource efficient economy is a global environmental and economic imperative. The transition represents both challenges and opportunities for the South African chemical industry. Success will depend on companies' ability to position themselves as providing technological and commercial leadership in the new markets which will emerge. Measurement of greenhouse gas emissions at company and sectoral level is a prerequisite for any company or sector to begin to understand the extent to which deviation from business as usual will be required. However, a company's carbon footprint goes beyond its direct or Scope 1 emissions. It is also important for a business to understand the indirect emissions from sources like electricity use and travel in order to manage the carbon intensity of a business.

Although CAIA has been collecting direct emission data from Responsible Care signatories since 2003 via the annual Quantitative Indicators of Performance submission, the time has now come to encourage the measurement of carbon footprints at company level and to extend measurement and reporting of greenhouse gas emissions from the current Scope 1 (company direct emissions) to Scope 2 (indirect emissions from purchased electricity, heat and steam) and Scope 3 (indirect emissions from sources not owned or controlled by the operating company e.g. employee flight travel and the transport of product by 3rd party contractors. In order to support this objective, CAIA developed an additional tool, a Responsible Care Carbon Footprint Guideline document to assist companies to:

- Develop a company Greenhouse House Gas (GHG) inventory to facilitate reporting of greenhouse gas emissions;

- Develop and implement an effective carbon management strategy; and
- Define, calculate and report a 'carbon footprint'. A carbon footprint is a measure of the total greenhouse gas emissions caused directly and indirectly by an individual, organisation, event or product. The carbon footprint generally covers the six greenhouse gases outlined in the Kyoto Protocol.

The Guideline Document forms part of the Responsible Care Pollution Prevention and Resource Efficiency Management Practice Standard. The Guideline Document assists companies that are about to embark on a carbon management strategy, and those that are seeking to improve their existing programmes. The document contains a "Starting Out" section to assist first-time companies and describes all factors that need to be considered. A "Moving Forward" section gives additional guidance to companies seeking to improve current carbon management systems.

The Guideline Document also contains information on the development of a company GHG Inventory to support the reporting of Green House Gas emissions as well as information on defining, calculating and reporting a company's "carbon footprint". The document is based on the methodology adopted by the Green House Gas Protocol's Corporate Accounting and Reporting Standards for measuring carbon footprints and the IPCC Guidelines for National Green House Gas Inventories and offers our members a credible guideline that is based on best practice standards and information.

The Carbon Footprint Calculation Guideline Document provides a "Typical Data Input Sheet" for the collection of Carbon Footprint Data and a worksheet with relevant "Emission Factors and Calculations" for use in calculating a Carbon Footprint once data has been collected. The Guideline Document was launched at a function on 23 March 2010. Responsible Care signatories, governmental representatives, NGOs, union members and representatives of the media attended the launch.

CAIA hosts the SASAC

As part of the continuing trade relationship with China the Association had the privilege to host a delegation from The State-owned Assets Supervision and Administration Commission of the State Council (SASAC) of China in April 2010. Among the issues discussed was how Responsible Care was implemented in South Africa and the progress with Responsible Care

implementation in China. The discussion also covered CAIA's Responsible Care Management Practice Standards and the Responsible Care Third Party Verification system implemented in South Africa.

Interaction with Unions

Responsible Care attended two Solidarity Bedryfsraad meetings in February and October 2010 respectively where Responsible Care Awareness and Product Stewardship presentations were given. A Responsible Care awareness presentation was given at a South African Chemical Workers Union (SACWU)

Shop Stewards training session in Secunda during February. The meeting was attended by a number of shop stewards and safety representatives employed by the chemical sector in the Secunda area.

Free State Clean-Up Campaign

CAIA again sponsored 1000 T-shirts and caps for the Free State province's National Clean-up Week that took place during September 2010. The objective of the campaign was to create awareness and to assist in mobilizing the local public proactively against littering. The campaign assisted in educating the local public about caring for the environment with a view to sustainability. The CAIA and Responsible Care logos were printed on the T-shirts sleeves and on caps which were worn whilst doing the clean-up.

● In celebration of SKC Ulsan Plant's 35th, 160 employees cleaned up Taehwa River by removing harmful plants

The SKC Ulsan Plant celebrated its 35th anniversary on October 14, 2011 a full-scale removal of harmful plants that disrupt the Taehwa River ecosystem. 160 employees including Plant Manager Gi-don Won in removing the Humulus Japonicus plant from the river which is considered Ulsan's lifeline. The Humulus Japonicus plant expands its habitat by twining around and drying up other plants, and its thorny stems are also harmful to people. As part of their efforts to clean up the Taehwa River, the SKC Ulsan Plant has been conducting the 1 Firm, 1 River volunteer program every month. This program is recognized for its contribution to the surrounding community as a local enterprise and continuous benefit to public welfare.

SKC headquarters also celebrated its anniversary by tending the graveyards of the state cemetery while the SKC Suwon Plant celebrated the occasion with volunteer work for Suwon Hwaseong Haenggung (Hwaseong Fortress), which was been recognized as a property of universal value by World Cultural Heritage.

Manager Gi-don Won of the SKC Ulsan Plant explained the importance of social contributions to the company during the day's event: "It is SKC's obligation as a corporate citizen to contribute to the local community. We will develop more effective social contribution programs to offer volunteer services that help make our local community a happier one."

SKC has made this anniversary more meaningful for them by opting for community volunteer work-which has been a part of their social contribution activities since 2007-instead of holding the typical corporate event.

● KP Chemical to be selected as 2010 Good Emergency Relief Drill Organization

KP Chemical Co., Ltd. won the Marshal Prize from the Fire Service Administrator of National Emergency Management Agency as it was selected as a "2010 Good Emergency Relief Drill Organization" on August 12, 2011.

Nambu Fire Station of Ulsan Metropolitan City commented that KP Chemical set an example in relief drills with its emergency relief drill for disasters last year. The fire-fighters commended KP Chemical for actively participating in theory lecture, equipment management, and fire-fighting drills supervised by fire-fighters. The company also worked to figure out the best exercises to reinforce their learning about the appropriate procedures for handling fires, etc.

2011 KRCC Seminar held

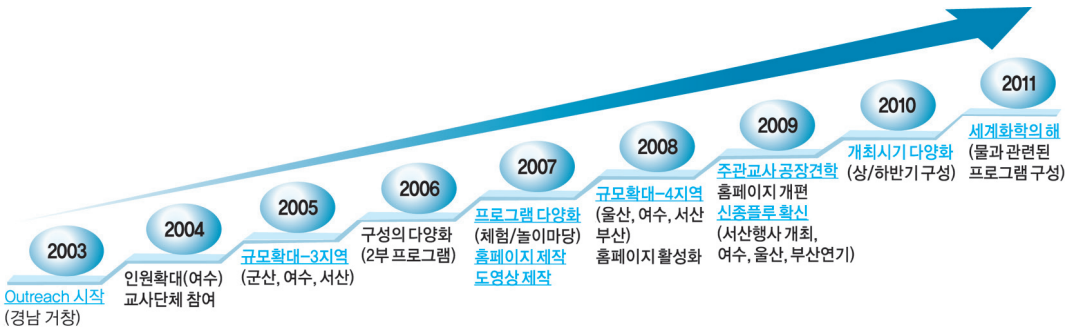
The KRCC held the 2011 KRCC seminar in Middle Conference Room B at the Korea Chamber of Commerce & Industry at 13:30 on Friday, June 24, 2011. The seminar was attended by about 30 participants including executives and employees of member companies, RC coordinators, and other people related to the chemical industry. Their goal was to raise awareness on expanding the implementation of product stewardship and the practice of the Third-party Audit.

Beginning with the greetings from Kim Kyung-Ok, Chairperson of Implementation (Director of BASF Korea), the seminar featured an introduction of cases of an external consultative review system (the 3rd party verification) in Brazil by Marcelo Kos (Director, ABIQUIM). Kos asserted in his presentation that it is necessary to move from the 3rd party verification to the 4th party verification with the joint support of citizens. This was then followed by a presentation by Yu, Eun-gyeong (Dept. Head of BASF Korea) on the introductory background, current status, outcome, and future plan of product stewardship in BASF Korea.

Park In-cheol (Deputy Department Head of Honam Petrochemical Corp.) presented the introductory background of local GPS, objective, implementation process, and results, and recommended other companies to participate. The executive committee members then received letters of appointment.

KRCC Held "2011 Come! Fun World of Chemistry!"

The KRCC held the "Come! Fun World of Chemistry" event in 2011 to present opportunities in which the elementary school fifth graders could enjoy chemical "experience activities" and "playground" programs, and to construct networks between local communities and the chemistry industry.



참가학교 : 1개교	10개교	75개교	89개교	95개교	187개교	24개교	198개교	260개교
참가인원 : 240명	500명	1,560명	1,720명	1,500명	1,650명	270명	1,600명	1,400명
참여회원 : 5개사	19개사	38개사	37개사	35개사	33개사	30개사	30개사	31개사

The event was successfully held, attracting a highly positive response with the participation of 1,400 children from 250 elementary schools located in Yeosu, Ulsan, Seosan, and Pusan. There were interactive activities, as well as the scientific plays and videos about the chemistry industry, for the children to not only enjoy, but also to invigorate their curiosity about the role of chemistry in daily life and encourage them to become future leaders in chemistry industry. "Young Chemistry Reporters," a promotional cartoon completed in late 2010 about the chemical industry, was viewed and met with an enthusiastic response. The children also learned the benefits of chemistry through a recent example that was immediately relevant to them and their communities. With the advent of 2011, the International Year of Chemistry, the ICCA provided a water-utilizing program for each region as outreach was recommended under the "Water-A Chemical Solution" theme.

The KRCC believes that it is vitally important to encourage children to dream. They are our prospect customers and the future leaders of the chemistry industry. Under the Responsible Care Program, our company will continue working to grow and develop the chemistry industry.

회원사 (List of Member Companies)

일반회원/ Full Members

- ㈜공리양행 Connell Bros. Company, Ltd.
- 금호미쓰이화학㈜ Kumho Mitsui Chemicals, Inc.
- 금호석유화학㈜ Korea Kumho Petrochemical Co., Ltd.
- 금호폴리켐㈜ Kumho Polychem Co., Ltd.
- 금호피앤비화학㈜ Kumho P&B Chemicals, Inc.
- 대림산업㈜ Daelim Industrial Co., Ltd.
- 대성산업가스㈜ Daesung Industrial Gases Co., Ltd.
- 대한유화공업㈜ Korea Petrochemical Industry Co., Ltd.
- ㈜덕양에너젠 Deokyang Energen Corporation
- 도레이도넨기능막코리아 유한회사
  Toray Tonen Specialty Separator Korea Ltd.
- 동서석유화학㈜ Tongsuh Petrochemical Corp., Ltd.
- 동우화인켐㈜ Dongwoo Fine-Chem Co., Ltd.
- 유한회사 듀폰 Dupont(Korea) Inc.
- 랑세스코리아(유) LANXESS KOREA Co., Ltd.
- ㈜롬엔드하스코리아 Rohm and Haas Korea Co., Ltd.
- 머크㈜ Merk Limited·Korea
- 바이엘코리아㈜ Bayer Korea Ltd.
- ㈜바커케미칼코리아 Wacker Chemicals Korea, Inc.
- 삼남석유화학㈜ Samnam Petrochemical Co., Ltd.
- 삼성비피화학㈜ Samsung-BP Chemicals Co., Ltd.
- 삼성석유화학㈜ Samsung Petrochemical Co., Ltd.
- 삼성정밀화학㈜ Samsung Fine Chemicals Co., Ltd.
- 삼성토탈㈜ Samsung Total Petrochemicals Co., Ltd.
- 선도화학㈜ Sundo Chemical. Co., Ltd.
- ㈜쉥커코리아 Schenker Korea Ltd.
- 스타이론코리아 유한회사 Styron Korea Ltd.
- ㈜아케마 ARKEMA
- 악소노벨아마이드㈜ Akzo Nobel Ltd.
- 애경유화㈜ Aekyung Petrochemical Co., Ltd.
- ㈜에보닉데구사코리아 Evonik Degussa Korea Ltd.
- ㈜SH에너지화학 SH Energy & Chemical. Co., Ltd.
- SKC㈜ SKC Co., Ltd.
- SK종합화학㈜ SK Global Chemical Co., Ltd.
- SK케미칼㈜ SK Chemicals Co., Ltd.
- SPG케미칼㈜ SPG Chemical Co., Ltd.
- 에어리퀴드코리아㈜ Air Liquide Korea Co., Ltd.
- 에어프로덕트에이씨티코리아(유) Airproduct ACT Korea Ltd.
- LG MMA㈜ LG MMA Corp.
- ㈜LG화학 LG Chem Ltd.
- 여천NCC㈜ Yeochun NCC Co., Ltd.
- OCI㈜ OCI Company Ltd.
- 용산화학㈜ Yongsan Chemicals, Inc.
- 이네오스코리아 INEOS Korea Ltd.
- 이수화학㈜ Isu Chemical Co., Ltd.
- 이스트만화이버코리아 Eastman Fibers Korea Ltd.
- 제일모직㈜ Cheil Industries Inc.
- GS칼텍스 GS Caltex Corp.
- 창신화학㈜ Chang Shin Chemical Co., Ltd
- ㈜카프로 CAPRO Corp.
- 케이알코폴리머㈜ KR Copolymer Co., Ltd.
- ㈜케이피케미칼 KP Chemical Corp
- KPX케미칼㈜ KPX Chemical Co., Ltd.
- KPX화인케미칼㈜ KPX Fine Chemical Co., Ltd.
- 코오롱인더스트리㈜ Kolon Industries, Inc.
- 폴리미래㈜ PolyMirae Company Ltd.
- 한국다우케미칼㈜ Dow Chemical Korea Ltd.
- 한국다우코닝㈜ Dow Corning Korea Ltd.
- 한국바스프㈜ BASF Company Ltd.
- 한국알콜산업㈜ Korea Alcohol Industrial Co., Ltd.
- 한국에이에스케이케미칼즈㈜ ASK Chemicals Korea Ltd.
- 한국에카화학㈜ Eka Chemicals Korea Co., Ltd.
- 한국허큘레스화학㈜ Hercules Korea Chemical Co., Ltd.
- ㈜한수 Hansu Ltd.
- ㈜한주 Hanju Corp.
- 한화케미칼㈜ Hanwha Chemical Corp.
- 호남석유화학㈜ Honam Petrochemical Corp.
- ㈜효성 Hyosung Corp.

준회원/ Associate Members

- 대한석유협회 Korea Petroleum Association
- 한국비료공업협회 Korea Fertilizer Industry Association
- 한국석유화학공업협회
  Korea Petrochemical Industry Association
- 한국정밀화학산업진흥회
  Korea Specialty Chemical Industry Association
- 한국클로르알카리공업협회
  Korea Chlor-Alkali Industry Association
- 한국 PSM포럼 Korea PSM Forum
- 한국화학물질관리협회
  Korea Chemicals Management Association
- 한국화학융합시험연구원
  Korea Testing&Research Institute for Chemical Industry