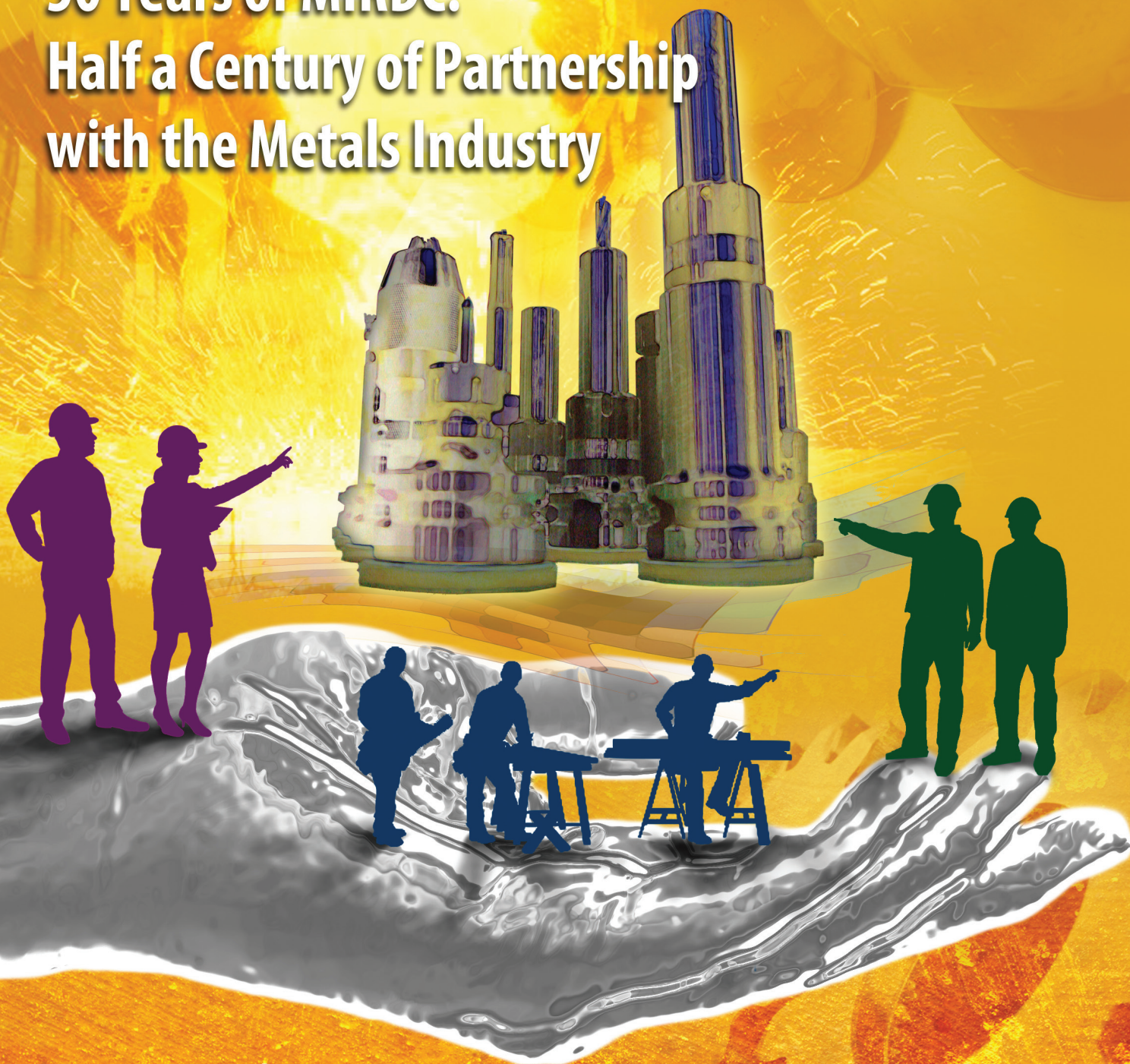


# M&E Week 2016

ISSN 2467-6717

**50 Years of MIRDC:  
Half a Century of Partnership  
with the Metals Industry**



Department of Science and Technology  
Metals Industry Research and Development Center

*Souvenir Program*

METALS INDUSTRY RESEARCH AND DEVELOPMENT CENTER

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**M&E WEEK 2016**  
**50 YEARS OF MIRDC:**  
**HALF A CENTURY OF PARTNERSHIP**  
**WITH THE METALS INDUSTRY**

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**METALS INDUSTRY RESEARCH AND DEVELOPMENT CENTER**  
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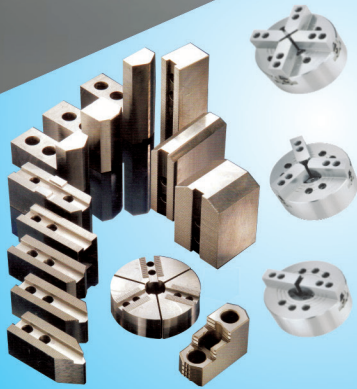
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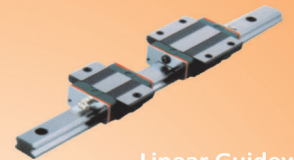


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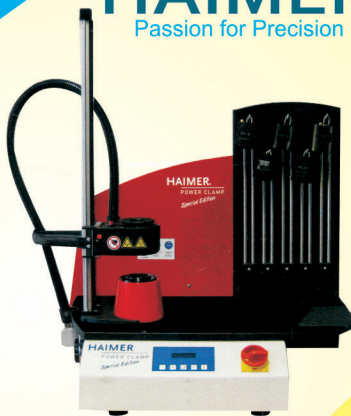
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# Message



MALACAÑAN PALACE  
MANILA



My warmest greetings to the **Department of Science and Technology-Metals Industry Research and Development Center** as you spearhead the observance of the **Metals and Engineering Week** in conjunction with your **50<sup>th</sup> Anniversary**.

Our collective resolve to make integrity, accountability, and good governance the centerpiece of our national agenda renewed confidence in our country and ushered in unprecedented growth across all segments of society. It is during this time of resurgence that metals development and research play an increasingly important role: As more of our people attain the wherewithal to realize their aspirations and demand higher quality goods, it is imperative that we produce high grade metals and alloys to build the products and machines that are necessary to meet our changing needs and compete in a globalized milieu.

May this observance highlight the importance of your sector in sustaining the momentum of our growth as well as in inspiring a new generation of scientists and engineers to join this crucial field. I challenge all stakeholders to work even harder to make sure that the local manufacturing and construction sector continues to expand and upgrade, that our nation may climb the rungs of development towards becoming a more modern and mature economy.

As long as we stay united on the Daang Matuwid, the gains we have made these past six years will be secured and incoming investments will maintain its steady flow. Let us remain steadfast on the path that brought us to our present resurgence, that our dream of a truly inclusive and progressive Philippines may become a reality within our lifetimes.

I wish you an eventful observance.



**BENIGNO S. AQUINO III**

MANILA  
13 June 2016

# Message



NATIONAL ECONOMIC DEVELOPMENT AUTHORITY



Greetings to the Metals Industry Research and Development Center (MIRDC) and its partners on your 50<sup>th</sup> Founding Anniversary. Congratulations are also in order for spearheading the Metals and Engineering Week 2016.

"Half a Century of Partnership with the Metals Industry" is a long time indeed. It speaks a lot about the importance of establishing partnerships and linkages in overcoming challenges and in driving the growth of the metals and engineering industries.

We all share the same vision of having a globally-competitive and innovative industry sector. The 2011-2016 Philippine Development Plan highlights the need to increase technological readiness to promote productivity and innovative capacity. As of 2015, roadmaps for the tool and die and metal casting sectors were completed through the efforts of the private sector and support from the government. The MIRDC, as an institution that fosters advancements in the fields of metals and engineering, serves as an important partner of the government in realizing its vision for the industry sector.

Amidst the country's robust economic performance is the growing need of the industry sector. The metals and engineering industries being the backbone of major industries is critical to industrial development. Technological capability-building through strengthened linkage among downstream industries, such as chemical, electronics and automotive, will help support the growth of the industry sector.

The metals and engineering industry offers vast opportunities for the development that have yet to be taken advantage of. I hope that this event will serve as an avenue to build and forge stronger ties across sectors and bear fruits of innovation.

On this note, I congratulate the MIRDC and its partners for half a century of service, excellence, and growing partnership with the metals, engineering and allied industries. At the same time, as we embark on more challenging journey, I encourage the MIRDC to do more in pursuit of its vision to be the center of excellence in science, technology and innovation for globally competitive metals, engineering and allied industries.

***Mabuhay tayong lahat!***

  
**EMMANUEL F. ESGUERRA**  
Socioeconomic Planning Secretary  
and NEDA Director-General



# Message



DEPARTMENT OF ENVIRONMENT AND  
NATURAL RESOURCES



Congratulations to the hardworking officials and staff of the Metals Industry Research and Development Center (MIRDC) in the annual celebration of the Metals and Engineering (M&E) Week. The commemoration of your 50<sup>th</sup> Founding Anniversary is indeed an attestation of your relentless efforts to place the MIRDC at the forefront of metals engineering and research!

The theme "**Half a Century of Partnership with the Metals Industry**" aptly demonstrates the invaluable contribution of MIRDC to the Philippine economy through meaningful service, cooperation and strategic linkage with the metals, minerals, engineering and allied industries during the past 50 years. The MIRDC's partnerships with these various industries locally and internationally have contributed to the development and advancement of state-of-the art and innovative technologies, which subsequently resulted in generating more jobs, achieving higher efficiency and increasing quality of outputs.

The participation of technical experts from other countries to share their experiences, albeit the challenges, in spearheading the development of their own metal industries, is a welcome inclusion to this year's M&E International Conference. While keeping abreast with the latest trends and developments in the fields of metals and engineering, it will also be an opportunity for the Conference delegates to learn how foreign institutions, similar to the MIRDC, have been instrumental in making their country's metal industries globally competitive.

As we look forward for another half a century, the Department of Environment and Natural Resources, through the Mines and Geosciences Bureau, anticipates more fruitful years of partnership with MIRDC, especially in promoting value adding of metallic minerals through the development of downstream metal industries.

More power and MABUHAY!

  
**RAMON J.P. PAJE**  
Secretary

# Message



DEPARTMENT OF AGRICULTURE



Warm greetings to the Department of Science and Technology - Metals Industry Research and Development Center (DOST-MIRDC) officers and staff on the celebration of your 50<sup>th</sup> Founding Anniversary held simultaneously with the Metals and Engineering (M & E) Week and the 2016 M & E International Conference.

Your theme – Half a Century of Partnership with the Metals Industry – underscores the importance of partnership in pursuing development efforts. It aptly captures our conviction of the crucial role of partnership with all sectors in our goal of enabling farmers and fishers as agricultural entrepreneurs.

The Department of Agriculture recognizes the efforts of MIRDC to complement the government's efforts to provide farmers and fisherfolk with appropriate farm machineries and technologies that are integral components of agricultural modernization. Through the collaboration of DA-Philippine Center for Postharvest Development & Mechanization and MIRDC, we continue to empower farmers and fisherfolk to maximize farm productivity and increase their income through the Farm Mechanization Program.

With the annual Metals and Engineering Week and the M&E Conference as platforms for R&D specialists' research findings and new technologies, I am confident that these could be adapted and utilized at the farm level. We rest on the strength of the partnership between DA and MIRDC as we bring together agri business and the metals industry to a better competitive position as we face the challenges of the changing environment and increasing market demands.

Mabuhay!

  
**PROCESO J. ALCALA**  
Secretary



# Message



DEPARTMENT OF TRADE AND INDUSTRY



It is with a great pleasure that I congratulate the Department of Science and Technology - Metals Industry Research and Development Center (DOST - MIRDC) on its 50<sup>th</sup> anniversary and celebration of the 2016 Metals and Engineering (M&E) Week, themed "Half a Century of Partnership with the Metals Industry." This important milestone no doubt is a testament to your organization's prominence as a public service institution.

For many years now, MIRDC has given support to the metals, engineering and allied industries. Through its programs and policies, it has empowered our local metals and engineering industries by providing the tools that have enabled them to succeed and benefit from the increasing opportunities that can be tapped in the international market. Throughout the years, MIRDC has stood side by side with DTI in enhancing our metals and engineering industries' competitiveness and pursuing technology development and research. They have been our valued partners in our Industry Roadmapping activities, playing significant roles in the development and implementation of the Tool and Die, Metal Casting and Aerospace Roadmaps, as well as lending their expertise and assistance in carrying out other industry roadmaps such as that of the Automotive, Iron & Steel and Motorcycle Industries. For this, I would like to extend my gratitude to DOST and MIRDC for being with us as we champion globally competitive and strong domestic industries.

This year, we are once again treated to a week of celebrating the metals and engineering industries, and it only gets bigger with the 50<sup>th</sup> anniversary of MIRDC. We bear witness to activities that showcase the industries' latest trends. In particular, we have the 2016 M&E International Conference, where experts in the metals and engineering industries from here and abroad, will gather to share their ideas and update us on current trends. This is an excellent opportunity to learn more about fundamental strategies and technology that can further boost the industry.

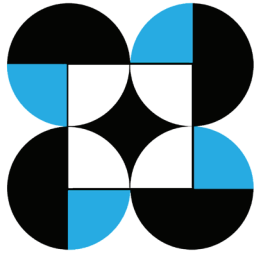
With ASEAN Economic Community at hand, we can move forward and widen our horizons regionally in the manufacturing industry. Let us, the government and private sector, take advantage of these prospects and work together in promoting inclusive growth and globally competitive industries.

Again, our sincerest congratulations to DOST and MIRDC, and best wishes for the success of this event. We look forward to the continued collaboration between DTI, DOST and MIRDC as we strive for the continuous development of our local industries. May you continue with your path towards the advancement of metals, engineering, and allied industries in the country.

Mabuhay!

  
**ADRIAN S. CRISTOBAL**  
Secretary

# Message



DEPARTMENT OF SCIENCE AND TECHNOLOGY



The Department of Science and Technology (DOST) is proud to be part of the celebration of the 2016 Metals and Engineering (M&E) Week.

This celebration of the 2016 M&E Week coincides with the 50th Founding Anniversary of the Metals Industry Research and Development Center (MIRDC), giving the industry added reasons to look forward to more exciting and fruitful activities ahead. This year's M&E Week celebration, with the theme '50 years of MIRDC: Half a Century of Partnership with the Metals Industry,' signifies that the essence of the MIRDC is its linking up and collaborating with the industry, its key players, and all its stakeholders.

Being able to provide science, technology, and innovation-based solutions to pressing national concerns is an impressive accomplishment, especially for the MIRDC, who plays a central role in the implementation of the Makinarya at Teknolohiya para sa Bayan (MakiBayan). Launched in 2012 to promote a more enabling environment for the metals, engineering and allied industries, MakiBayan have been gaining significant successes through the projects we implemented and, more importantly, through the linkages we foster with the industry.

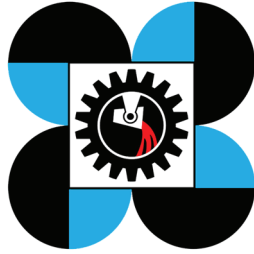
Our alliance has taken us this far. The years are proof that we are competently able to deliver the most needed interventions so that the M&E industries benefit the most from our synergized efforts. Age, as they say, is just a number. With all that we have achieved, let us keep counting the years, and together, celebrate the numbers as they come with bigger, better and more meaningful service to the M&E industries.

I would like to congratulate the DOST-MIRDC and all our MakiBayan partners for a significant milestone in the M&E industries for the years to come.

*Mabuhay!*

  
**MARIO G. MONTEJO**  
Secretary, DOST

# Message



**METALS INDUSTRY RESEARCH AND  
DEVELOPMENT CENTER**



All attention is once again focused on the country's metals and engineering industries as it celebrates in June the 2016 Metals and Engineering (M&E) Week. The Metals Industry Research and Development Center is truly delighted to take the lead role in this national celebration as we, together with the Department of Science and Technology, commit to focus our R&D initiatives and science and technology-related services specially for the enhancement of the industry's productivity and global competitiveness.

From the very beginning, the MIRDC's services and activities have always been attuned to the requirements of the industry. This year's theme, '50 Years of MIRDC: Half a Century of Partnership with the Metals Industry,' is a salute to our golden years with the industry players; the small, micro and medium enterprises; and the industry associations, whom we work hand-in-hand and celebrate milestones with.

Our partnership has helped us overcome challenges and led us to wider horizons. Establishing strategic alliances has indeed become a culture at the MIRDC, and we have started to reap the fruits of these initiatives. The M&E International Conference, the highlight of this year's M&E Week celebration, is an occasion for our local partners to learn from international linkages that we have fostered through the years. Rarely do we have the chance to listen to foreign experts who will share with us their valuable knowhow. It is not a small task to bring local and foreign participants together. We are very proud to be hosting such a momentous event.

This year marks a shining moment of our linkage, and heralds the beginning of more fruitful outcomes of our shared efforts. May this celebration instill in all of us the intense passion to continually harness science, technology and innovation in our march to advance the metals, engineering and allied industries.

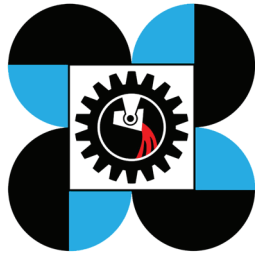
More power to the industry. More power to our partnership.

Mabuhay!



**ROBERT O. DIZON**  
Executive Director

# Message



**METALS INDUSTRY RESEARCH AND  
DEVELOPMENT CENTER**



Motivated by the vision to be a center of excellence in science, technology and innovation, the Metals Industry Research and Development Center pursues world-class excellence in all its initiatives so that through its services, the local metals and engineering industries is able to meet global challenges head-on.

Keeping us going in our pursuit to serve the industry are the triumphs and milestones that we achieve along the way. The Center's successes serve as our indicators that our presence is truly purpose-oriented, our activities results-driven. Our achievements are realized through the partnerships we continually nurture and enhance with industry players. Hence the theme '50 Years of MIRDC: Half a Century of Partnership with the Metals Industry' for the 2016 Metals and Engineering (M&E) Week celebration.

This year, we are holding the M&E Week celebration with several activities, the highlight of which is the M&E International Conference. The Center accords prime importance to this event, along with the commemoration of its 50<sup>th</sup> Founding Anniversary. The metals industry sits at the heart of all that we do, and all that we intend to accomplish in the coming years anchored on a strong and collaborative network with the industry. Our partnership allowed us to map out the interventions best suited to address the varied requirements of the industry, from the very basic to the most crucial ones.

The 2016 M&E Week celebration is the epitome of what quality service must be. This part of the Center's history will forever be marked with pride and fulfillment, in the same way that this celebration serves as the dawn of a truly world-renowned Philippine metals and engineering industries.

With our partnership with the metals industry, the MIRDC is geared up to exert bolder efforts to strategically chart its direction and propel the industry to new heights. Science, technology, and innovation, coupled with our strong linkage, will be our most essential pillars. We will remain true to our commitment to enhance the productivity of the metals, engineering and allied industries for a more competitive nation.

  
**AGUSTIN M. FUDOLG, Dr. Eng.**  
Deputy Executive Director, DOST-MIRDC  
and Chair, 2016 M&E Week Committee

# Message



PHILIPPINE DIE AND MOLD ASSOCIATION



Congratulations to the Department of Science and Technology – Metals Industry Research and Development Center (DOST-MIRDC) on its 50<sup>th</sup> Founding Anniversary.

Indeed, the Agency has come a long way from its inception to where it is now with achievements that touch on different sectors that make-up the entire Metalworking Industry. The Agency is keen on taking on the challenges of developing talents and globalization by keeping abreast with the latest technology in the international arena. They have sent delegates to various countries to benchmark new and emerging technology with the primary aim of improving existing technology, broaden technical knowledge and enhance capacity building through Human Resource Development (HRD) thereby, uplifting the lives of Filipino Skilled Workers.

The PDMA Inc. is proud to be in partnership with the DOST – MIRDC. As partners under the Makinarya at Teknolohiya Para sa Bayan (MakiBayan) initiative, we have established the Die and Mold Solutions Center - with its thrust to train highly skilled die and mold makers and designers. The “Die and Mold Designing and Making (D2M2) Training Program,” for instance, allows us the use of the latest equipment and software to improve our Industry’s competitiveness and productivity to be able to face the challenges of a borderless community.

We are now looking forward to the continued program of the Agency to contribute to nation building. PDMA Inc. commits our full support in this endeavor and we wish you more power and success.

  
**PHILIP C. ANG**  
President

# Message



METALWORKING INDUSTRIES ASSOCIATION  
OF THE PHILIPPINES, INC.



It has been five decades that MIDC, now MIRDC, was jointly organized by the government and private sector on June 18, 1966, under RA 4724, as a non-profit institution aimed to primarily develop technologies of the metal Industries. The Center was primarily tasked to work for the advancement of the metals, engineering, and allied industries in the country to work closely with the government and the private sector.

As an attached agency of the DOST, its mandate has evolved from research and development to directly assisting the metals industry along technology enhancement and developments and other functions much aligned to the major thrusts of DOST and other government institutions.

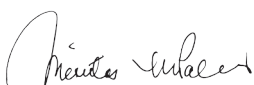
The Metalworking Industries Association of the Philippines (MIAP) being MIRDC's major collaborator in the various programs and thrusts, is taking the major edge along science and technology transfers and services for so many years.

This year's M&E week to be celebrated in conjunction with the 50<sup>th</sup> Founding Anniversary of MIRDC themed, "Half a Century of Partnership with the Metal Industries," MIAP is indeed really proud and committed to continue its efforts for a healthy partnership with DOST-MIRDC as evidenced by its never ending complementation among stakeholders to reach its goal for global competitiveness.

As I hold the stewardship of the metalworking Industry, I enjoy our vast membership throughout the country as well as other private sectors to come and participate in this very important and awaited conference. Various activities are set like business opportunities and capability-building opportunities are some of the many expectations since metals and engineering experts locally and those invited from other countries are coming to highlight this conference with one goal in keeping abreast of the latest trends and developments in the field of Metals & Engineering.

Our congratulations and our most sincere prayers to the Department of Science and Technology – Metal Industry Research and Development Center (DOST-MIRDC) for a job well done for this grand celebration.

See you all in this very momentous occasion. Mabuhay and God bless!

  
**INESITAS L. PALERMO**  
National President - MIAP



# Message



METALWORKING INDUSTRIES ASSOCIATION  
OF THE PHILIPPINES, INC.  
METRO MANILA CHAPTER



This year marks another milestone in the metal industry in the country. And we, the **Metalworking Industries Association of the Philippines (MIAP)**, take pride in extending our warm wishes to the **Department of Science and Technology - Metals Industry Research and Development Center (DOST-MIRDC)** on its 50<sup>th</sup> Founding Celebration to be held in conjunction with the **Metals & Engineering Week** celebration on 13-17 June 2016 with the theme "50 Years of MIRDC: Half a Century of Partnership with the Metals Industry."

For half a century, we have witnessed the strong partnership between the DOST-MIRDC and the Metals Industry that gears towards achieving further development. As we prepare for the upcoming celebration, we enjoy the guests, participants, and the rest of the M&E industries to take part in and fully support this momentous event.

Mabuhay!

  
**LUCILITO P. ANGELES**  
President  
MIAP-Metro Manila

# Message



PHILIPPINE WELDING SOCIETY



On behalf of the Philippine Welding Society, I would like to greet and congratulate the Metals Industry Research and Development Center (MIRDC) on the occasion of the Metals and Engineering Week celebration on 13-17 June 2016 with the theme "50 Years of MIRDC: Half a Century of Partnership with the Metals Industry."

With the gathering of foreign and local M&E experts in this event, it is expected that thoughts, ideas, and innovations will be brought about in facing the various challenges in the metals industry. Moreover, engineering capabilities will be enhanced further in the light of various technical practices by other organizations or countries unknown to others. This will contribute a lot to the development of the metals industry itself in the Philippines.

MIRDC plays a major part in supporting the metals and engineering industry across the many industries and businesses in the Philippines. Thus, the celebration of the M&E Week is a good avenue to enhance the linkage with and among various industries, learning institutions and societies in the country.

The Philippine Welding Society is proud and privileged to have the MIRDC as among its partners.

**ROBERTO M. DELA CRUZ**

Philippine Welding Society  
President (2015-2017)

# Message



PHILIPPINE IRON AND STEEL INSTITUTE



We extend our warm greetings to the Department of Science and Technology - Metals Industry Research and Development Center (DOST-MIRDC) on its 50th Founding Anniversary. DOST-MIRDC has been the catalyst and driving force of our country's Metals and Engineering (M&E) sector and we wish them success and more power in the coming years.

This year's M&E International Conference theme, "50 Years of MIRDC: Half a Century of Partnership with the Metals Industry" will provide a forum to discuss and analyze the challenges and opportunities in the metals and engineering industries. It is an event that will keep us abreast with the market developments and outlook, new technologies, new product developments, process and quality improvements.

The ASEAN Economic Community (AEC) implementation and China's "One Belt One Road" initiative will greatly impact on the metals and engineering sector's market and business models. We are now doing business in a more open and integrated region so a stronger collaboration between the M&E sector and government is vital for survival. We thank and congratulate DOST-MIRDC for organizing this important conference.

  
**ROBERTO M. COLA**  
President

# Message



**MECHATRONICS AND ROBOTICS SOCIETY OF THE  
PHILIPPINES**



The Mechatronics and Robotics Society of the Philippines congratulates the Department of Science and Technology – Metals Industry Research and Development Center (DOST-MIRDC) on the occasion of holding the 50th Founding Anniversary in conjunction with the Metals and Engineering (M & E) Week activities to be held at the DOST-MIRDC Compound, Gen. Santos Avenue, Bicutan, Taguig City on June 13 - 17, 2016.

This year's theme, "50 Years of MIRDC: Half a Century of Partnership with the Metals Industry," reflects the continuing efforts of the institution that, through the years, have stood up to many various challenges. Under the mandate of DOST-MIRDC, which is to enhance global competitiveness and productivity of the industry, we are able to improve our level of competence and intensify partnerships.

Through the M&E International Conference, members of allied industries will gain insight or knowledge of the latest development in different fields and areas they are most interested in. Products and latest technology information will also be presented by some M&E experts from other countries and representatives from our local industries. An essential part of the event is the consortium of allied industries that strengthen linkage and cooperation, and share expertise and resources to amplify the industry's research and development capability and provide long term solutions to the pressing issues of our industry.

Again, congratulations to DOST-MIRDC.

More power!

A handwritten signature in black ink, appearing to read "Joel B. Bajador".

**JOEL B. BAJADOR, PECE, MBA, ACPE**  
President

# Message



**SOCIETY OF MANUFACTURING ENGINEERS**  
**Manila Chapter 165**



Esteemed colleagues and Guests, it is my pleasure to address my Welcome Remarks in the 50<sup>th</sup> Founding Anniversary of the DOST - MIRDC.

As the Chapter Chairman of Society of Manufacturing Engineers, Manila Chapter 165, I am responsible for overseeing the efforts to advance our joint scientific endeavors and ensuring that science and technology are at the core of both local and foreign policy.

This is a particularly exciting and opportune moment to advance our domestic and international strategies of scientific competitiveness and to build productively in Science and Technology.

We live in a world of increasing interdependencies and thus of shared global challenges - the challenges of economic development and growth, of providing our youth with a promising future, of improving health care for all our citizens, of sustainable agriculture, of energy security, of clean accessible water, of environmental conservation and of climate change effects.

New technologies and discoveries will be essential to addressing the problems our environment, the world is facing. Science, technology, engineering and innovation are tools that can deliver workable solutions.

Our assets include innovation, science, technology, and engineering. The Philippines has so much to share, and so much to benefit from, in promoting sound enabling environments and policies supportive of scientific research, and technological innovation.

We realize that solutions to these challenges require building coalitions among partners within the government, among foreign governments, international organizations, the private sector, and civil society. We seek international partnerships based on shared interests, talents, and mutual respect. We look forward to working closely with you in this area.

Thank you for your attention and God bless us all.

Very truly yours,

  
**ROSTICO F. MORALES**  
Chapter Chairman, SME Manila

# Message



**AEROSPACE INDUSTRIES ASSOCIATION  
OF THE PHILIPPINES**



Greetings and Congratulations from Aerospace Industries Association of the Philippines (AIAP) on the 50<sup>th</sup> Founding Anniversary of the Department of Science and Technology - Metals Industry Research and Development Center (DOST-MIRDC). The event highlights another year of strategic collaboration with the metals, engineering and allied industries. The AIAP extensively supports the activities of DOST-MIRDC that will raise productivity by elevating technology and recognizes the partnership in human resource development to increase the competencies to be able to develop the Aerospace market.

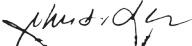
The 2016 M & E International Conference with the theme "50 Years of MIRDC: Half a Century of Partnership with the Metals Industry" is truly a celebration. 50 years of research and development to boost the metals and engineering industries in realizing its potential viable advantage.

As we gear towards strategic industry roadmap development, there will be a lot of requirements that could only be addressed by the collaboration with DOST-MIRDC. Evolution with advance technology, intensive and complicated processes, and research on new materials are just a few. New markets and applications emerge as those antiquated technologies are slowly being phased out. In this highly dynamic environment, the only solution to contend, or even outlast is through **innovation** - continuous advancement of products, processes, and organization.

Metal Engineering and Metallurgical Industries are operated essentially in all sectors of the economy including **aerospace**. The Philippines has the potential to be a center for manufacturing for the global aerospace and aviation industries. Thus, there is a need to unceasingly upgrade the local industry's technology and skills development efforts in new platform. The strong vertical and horizontal measures and interventions and coordination mechanisms which DOST-MIRDC advance will address the most binding constraints and gaps and will strengthen Aerospace industry competitiveness and its business environment.

New investments generating employment opportunities will reinforce national economic objectives among the specific growth sectors. Aerospace with its high added value and high technical requirements truly benefits from the projects done by DOST-MIRDC.

Trust for an unwavering support and the steadfast success we both aim.

  
**JOHN T. LEE**  
President, AIAP

Aerospace Industries Association of the Phil.

# Message



PHILIPPINE PARTS MAKER ASSOCIATION



We, the Philippine Parts Maker Association (PPMA), would like to extend our sincerest congratulations to the Department of Science and Technology - Metals Industry Research and Development Center (DOST-MIRDC) for the successful staging of its 50<sup>th</sup> Founding Anniversary in conjunction with the Metals and Engineering (M&E) Week celebration.

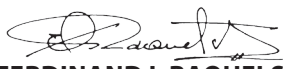
On behalf of the organizers, I would like to welcome experts, representatives and visitors to the year's most comprehensive gathering of the metals, engineering and allied industries.

It is indeed an exciting time for the M&E industries as we continue to grow and adapt, and remain motivated despite being confronted by challenges. The M&E industries is confronting a time of many changes and the Conference is a timely event in order to bring inspired and excellent people together to overcome present, as well as future challenges. This is an excellent opportunity for the attendees to make productive exchange of experiences, practices, initiatives, knowledge, and establish ties that will enable us to meet the metal and engineering challenges of the future.

The Five-day event truly serves as an important platform for updating, knowledge sharing, and for ultimately shaping the industry's future.

The event's theme, "50 Years of MIRDC: Half a Century of Partnership with the Metal Industry," is a testament on how the industry surpassed the evolving metal and engineering trends worldwide and the technical challenges facing the industry in the past. We should all be very proud of where we are today and excited about where we are headed. On behalf of the organizers, I would like to thank each of you for your unwavering support and generosity. You, as experts and leaders, are truly our greatest asset today and tomorrow, and many things become attainable because of your support and help. Throughout this conference, I ask you to stay engaged, keep us proactive and help us shape the future of the M&E industries. My personal respect and thanks goes out to all of you.

Good luck and God bless!



**FERDINAND I. RAQUELSANTOS**

President

Philippine Parts Maker Association (PPMA)

# Message



PHILIPPINE METALCASTING  
ASSOCIATION, INC.



Our warmest greetings to the Metals Industry Research and Development Center (MIRDC) as you celebrate the Metals and Engineering (M&E) Week and 50<sup>th</sup> Founding Anniversary.

Philippine Metalcasting Association, Inc. (PMAI) is truly honored for being one of your partners in the industry and we are hoping for a continuous harmonious relationship with you.

As the theme "50 Years of MIRDC: Half a Century of Partnership with Metals Industry," PMAI knows that MIRDC is full of plans for the industry and we would like to extend our full support on the endeavors of the MIRDC. PMAI congratulates and hopes for the continuous success of MIRDC.

Thank you and Mabuhay tayong lahat!

**Mr. Jerry Hui**  
PMAI President



# Message



PHILIPPINE SOCIETY FOR NONDESTRUCTIVE TESTING, INC.



On behalf of the Philippine Society for Non-destructive Testing, I would like to extend our congratulations and best wishes to MIRDC as it celebrates its 50th Founding Anniversary. Once again, MIRDC has demonstrated its role as the catalyst of partnerships among the stakeholders in the metals, engineering, and allied industries.

The roles of anniversary celebrations and conferences are two fold. One, they provide the venue through which new developments, technologies, and challenges are unfolded and shared. Two, they serve as the occasion where friendships are renewed and new colleagues are met. Both act as a binding force and impetus towards a more dynamic industry.

The PSNT is very lucky to be a part of this momentous occasion. As a Society we would like to share with MIRDC's vision towards a globally competitive metals and engineering industries. Nondestructive testing plays a significant role in the assurance of the quality of metal structures. Undoubtedly, there is room for collaborations and partnerships. Our main thrust is technology transfer and development of qualified NDT practitioners through training. Let us then join hands and be partners. Let us salute MIRDC for providing the pivotal role of bringing us together.

A handwritten signature in black ink, appearing to read "Edgardo C. Aguilar". The signature is stylized and cursive.

**EDGARDO C. AGUILAR**  
President

# Message



MOTORCYCLE DEVELOPMENT PROGRAM  
PARTICIPANTS ASSOCIATION, INC.



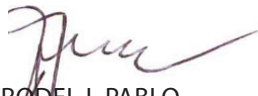
On behalf of the Motorcycle Development Program Participants Association, Inc. (MDPPA), we would like to extend our warm greetings and felicitations to the Metals Industry Research and Development Center (MIRDC) as it celebrates another milestone in its corporate existence, its 50th Founding Anniversary.

Throughout the years, MIRDC has significantly contributed in the development and advancement of the metals and engineering industry including the allied industries. Half a century has past and it continues the promotion of research and development, technology transfer, scientific and technological services, and innovations.

MDPPA values its cooperation and partnership with MIRDC in advancing the growth of our manufacturing industries. We look forward to more productive engagements between our two organizations that will intensify the competitiveness of our industries globally.

We wish MIRDC a momentous anniversary and more prolific years ahead!

Mabuhay!



RODEL I. PABLO  
President

## Presidential Proclamation No. 144

Declaring the Period from June 13 to 18, 2011 and Every Third Week of June Thereafter  
as  
*"Metals & Engineering Week"*

**WHEREAS**, the metals and engineering industries play a vital and significant role in the country's economic growth and development, being an indispensable part in government and private infrastructure projects;

**WHEREAS**, since its creation under Republic Act No. 4724, as amended by Republic Act No 6428, the Metals Industry Research and Development Center (MIRDC) has been engaged in providing the public and private sectors with professional management and technical expertise on vital activities such as training of engineers and technicians, information exchange, trade accreditation service, quality control and testing of metal products, and research and business economics advisory program; and,

**WHEREAS**, there is a need to express our gratitude to the metals and engineering industries for their sustained efforts, in partnership with the government, in promoting, developing and expanding the metals industry and to spread awareness of their vital contribution to the country.

**NOW, THEREFORE, I, BENIGNO S. AQUINO III**, President of the Republic of the Philippines, by virtue of the powers vested in me by law, do hereby declare 13 to 18 June 2011 and every third week of June thereafter as the "Metals and Engineering Week," under the auspices of the MIRDC and the Department of Science and Technology (DOST).

I call upon the metals and engineering industries, as well as the private sector, associations and entities, to participate actively in the proper observance of the Metals and Engineering Week and to give their full support and recognition to the ever-growing importance of the metals and engineering industries in nation-building.

**IN WITNESS WHEREOF**, I have hereunto set my hand and caused the seal of the Republic of the Philippines to be affixed.

**DONE** in the City of Manila, this 11th day of April, in the year of our Lord, Two Thousand and Eleven.

(Sgd.) **BENIGNO S. AQUINO III**

By the President:



(Sgd.) **PAQUITO N. OCHOA, JR.**  
Executive Secretary



# PHILIPPINE WELDING SOCIETY, INC.

DOST-MIRDC Compound, Gen. Santos Avenue. Upper Bicutan Taguig City  
Telephone No. (02) 8185255/ (02) 8944609 Mobile No. 0917-9090261  
E-mails: pws@pws.org.ph / pws\_events@pws.org.ph URL: www.pws.org.ph

Philippine Welding Society started as a vision of various industry professionals whose aim is: to advance the science and professionalize the practice of welding in the country. On September 19, 1991, encouraged by the government, business sector, educators and practitioners, twelve founding members from construction, manufacturing and inspection companies bonded together and established the Philippine Welding Society, Inc. (PWS). On February 13, 1992, The Securities and Exchange Commission (SEC) registered the Philippine Welding Society Inc. as a non-stock, non-profit organization.

The Objectives of the organization are to promote the advancement of the science and practice of welding and to advise and support government entities whenever possible on matters of standardization, public safety and health; maintain among members' high ideals of integrity, learning, professional competence, public service and conduct; provide proper forum for meeting, exchanging of ideas and opinions, and to be involved in the solution of multifarious problems affecting the country in general and the welding profession; conduct workshops and seminars for purpose of keeping its members abreast of progress in the welding field; and promote consciousness among members of their serious responsibilities in helping our country move forward in our national development .



## SERVICES OF THE SOCIETY

### QUALIFICATION & CERTIFICATION

Welding Engineers- JIS Z3410 (ISO 14731) /  
WES 8103 Certification System)

Assessment for Welders (WPQT and TESDA Certification)

Certified Welding Inspectors Course (Seminar, Review and Exam)

Qualification and Certification of Welding Personnel

Conduct of Welding Inspection

Up-grading Course for the Welding Industry

Preparation of Welding Procedure for the Industry

Technical Consultancy

Accreditations of Training, Testing, and Inspection of Institutions

### MEMBERS BENEFITS

Annual Welding Competition and Convention

Seminars & Workshops

Provide Forum for Exchange of Ideas on Welding

Research and Development/ Special Reports

Technical Bulletins/ Welding Products Exhibits

Welding Library

### COURSES OFFERED

Welding Inspectors Course

In-house Welding Personnel Training Course

Welding Trainer's Training Course

Welding Supervisors Course

Maintenance Welding Course

AWS Welding Inspectors Course Review

Industrial Fabrication and Fitters Training

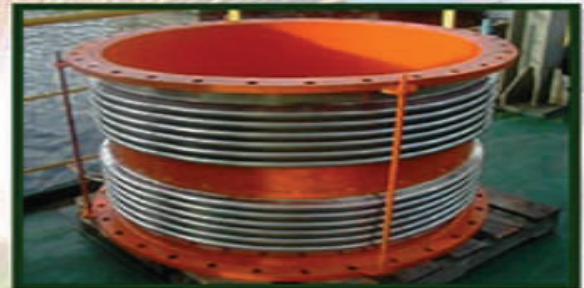
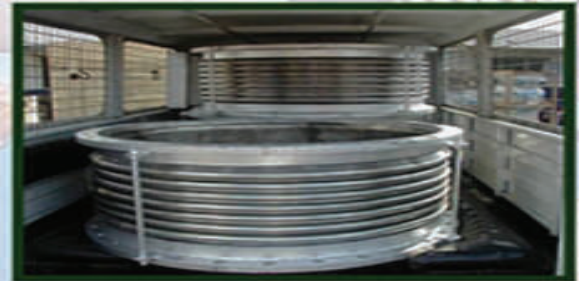


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## I. PRODUCTS

### A. Expansion Joints / Flexible Pipes

- (SS Materials) Fabrication
- single and multi bellows
  - single and multi-ply bellows
  - flange and flangeless flexible pipes
  - standard or made to order  
( customized)

### B. Rubber Products

- rubber pods and gaskets
- rubber impellers, bushings
- O-ring rollers, gaskets diaphragm
- rubber expansion joints
- mechanical seal

## II. SERVICES

### A. Machining

### B. Design and Fabrication

### C. Repair of Industrial and Marine Boilers, Super heaters, air heaters, and economizers

### D. Marine Hot Works

### E. Repair and reconditioning of all kinds of Industrial pumps

## Engr. Jong-Deok KIM

*Principal Researcher*  
Dies & Molds Technology Group  
Korea Institute of Industrial Technology  
(KITECH)



Engr. Jong – Deok KIM , a Principal Researcher of the Dies and Molds Technology Group at KITECH is a graduate of Mechanical Engineering from the Seoul National University, Republic of Korea. KITECH is a government research institute founded in 1989 to support the industry sector, especially small and medium enterprises (SMEs). KITECH is the only application-oriented research institute in Korea that focuses on technology commercialization. KITECH plays a key role in integrating the resources and capabilities of 25 government-run institutions in the field of science and technology into one platform of technology commercialization support by running the Integrated SME Support Center.

Engr. Kim's areas of expertise and research interests include fine blanking technology, roll forming technology, sheet metal forming technology and rapid tooling technology (Metal 3D printing technology). Engr. Kim has over 100 publications as project reports and published about 70 papers in various journals. He has likewise presented around 60 papers in various international events.

Prior to his current position, he served as Principal Research Engineer of KITECH - Europe Office. He also served as Senior Research Engineer of KITECH and was engaged in research and development activities related to die and mold technology. Prior to his joining KITECH, he served as Research Engineer at Korea Institute of Machinery and Materials (KIMM) doing research and development of scientific teaching materials and automation technology for small and medium enterprises.



## **Dr.-Ing. Kristian Oliver Arntz**

*Head of Department*  
Laser Materials Processing  
Fraunhofer Institute for Production Technology  
(IPT)

Dr. Kristian Arntz is the current Department Head of Laser Materials Processing of Fraunhofer Institute for Production Technology (IPT). There are currently more than 60 research institutes and research establishments that are part of the Fraunhofer Gesellschaft – Europe’s largest organization for applied research.

This includes the Fraunhofer IPT, established in 1980, which combines long time knowledge and experience in all fields of production technology - process technology, production machines, production metrology and quality as well as technology management.

Located in Aachen and Paderborn, IPT offers clients and project partners with tailor made solutions and immediately actionable results for a connected, adaptive production. The Fraunhofer IPT employs approximately 450 staff working on projects in a 6000 m<sup>2</sup> facilities, 3500 m<sup>2</sup> of which are used as laboratories and machining workshops.

Dr. Kristian Arntz studied mechanical engineering and materials technology at the Technical University RWTH Aachen majoring in production technology. In his PhD thesis, he developed a process model for “multi axis hard milling of tempered high speed steel.” He worked as scientist in the Process Technology Department at the Fraunhofer IPT from 2003 to 2009, concentrating on HSC-, micro- and hard milling technology for tool and die making.

In 2005, he became head of the business unit "tool and die making" offering research and consulting for companies in that area which today is one of the most recognized institutions for mold and die making research in Europe. Since April 2009, Mr. Arntz has been Chief Engineer of the department "laser machining" at the Fraunhofer IPT which develops and qualifies efficient manufacturing processes to use laser beam technologies in industrial value chains.

He is Technical Director and Associate of the WBA Aachener Werkzeugbau Akademie, founded in 2010. This company offers consulting, services and education for tool and die making.

Since 2015, Dr. Arntz is Managing Director of the ACAM Aachen Center for Additive Manufacturing GmbH. ACAM offers research and development, services and further education all around additive manufacturing in an industrial partner network.

## Dr. Yong-Taek Im

*President*  
Korea Institute of Machinery and Materials  
(KIMM)



Dr. Yong-Taek Im is the current president of the Korea Institute of Machinery and Materials (KIMM) which was founded in 1976 as a government-funded research institute under the Ministry of Science, ICT and Future Planning. KIMM's mission is to contribute to economic growth of the nation by performing research & development (R&D) on key technologies in the area of mechanical engineering. KIMM conducts reliability tests, evaluates machine components and materials, and commercializes the developed products or machineries through technology transfer and support.

Dr. Yong-Taek Im received his B.S. in Mechanics and Design and M.S. in Mechanical Engineering from Seoul National University, and Ph.D. in Mechanical Engineering at the University of California, Berkeley in 1985.

After one year of Post-doctoral experience at Berkeley, he began teaching and research at the Industrial and Systems Engineering Department of the Ohio State University until 1989. After that, he joined the faculty of the Department of Mechanical Engineering, Korea Advanced Institute of Science and Technology (KAIST), where he served as Associate Dean of University Planning and Coordination in 1991 and established the Office of International Relations in 1993.

From 2007 to 2011, he served as Dean of the Office of External Affairs and Associate Vice President of the Office of Special Projects and Institutional Relations. Since 2008, he launched and co-organized the International Presidential Forum on Global Research Universities four times. He served as Chairman of the Asian Science and Technology Pioneering of Research and Education League in 2011, Director of the Mechanical Engineering Division of the Korea Institute of Science and Technology Evaluation and Planning, and Editor-in-Chief of the Journal of Mechanical Science and Technology of the Korean Society of Mechanical Engineers (KSME).

He received Humboldt Research Fellowship from Germany and Australia-Korea International Education Policy Exchange Program Fellowship from Australia. He was elected to be a Fellow of American Society of Mechanical Engineers and the Korean Academy of Science and Technology, and full member of National Academy of Engineering of Korea.

Prof. Im received various awards such as F. Staub Award, Johnson Gold Medal, GCMM Outstanding Research and Scholarship Award, SDPS Award, Presidential Commendation Award from the Korean Government, the first Academic Excellence Award from the Korean Society of Technology for Plasticity, and Designated Affiliate Professorship of POSCO.





**MIRDC**  
METAL INDUSTRIES RESEARCH &  
DEVELOPMENT CENTRE



## Dr. Ching-Ming Chen

*Acting President*  
Metal Industries Research and Development Centre  
(MIRDC, Taiwan)

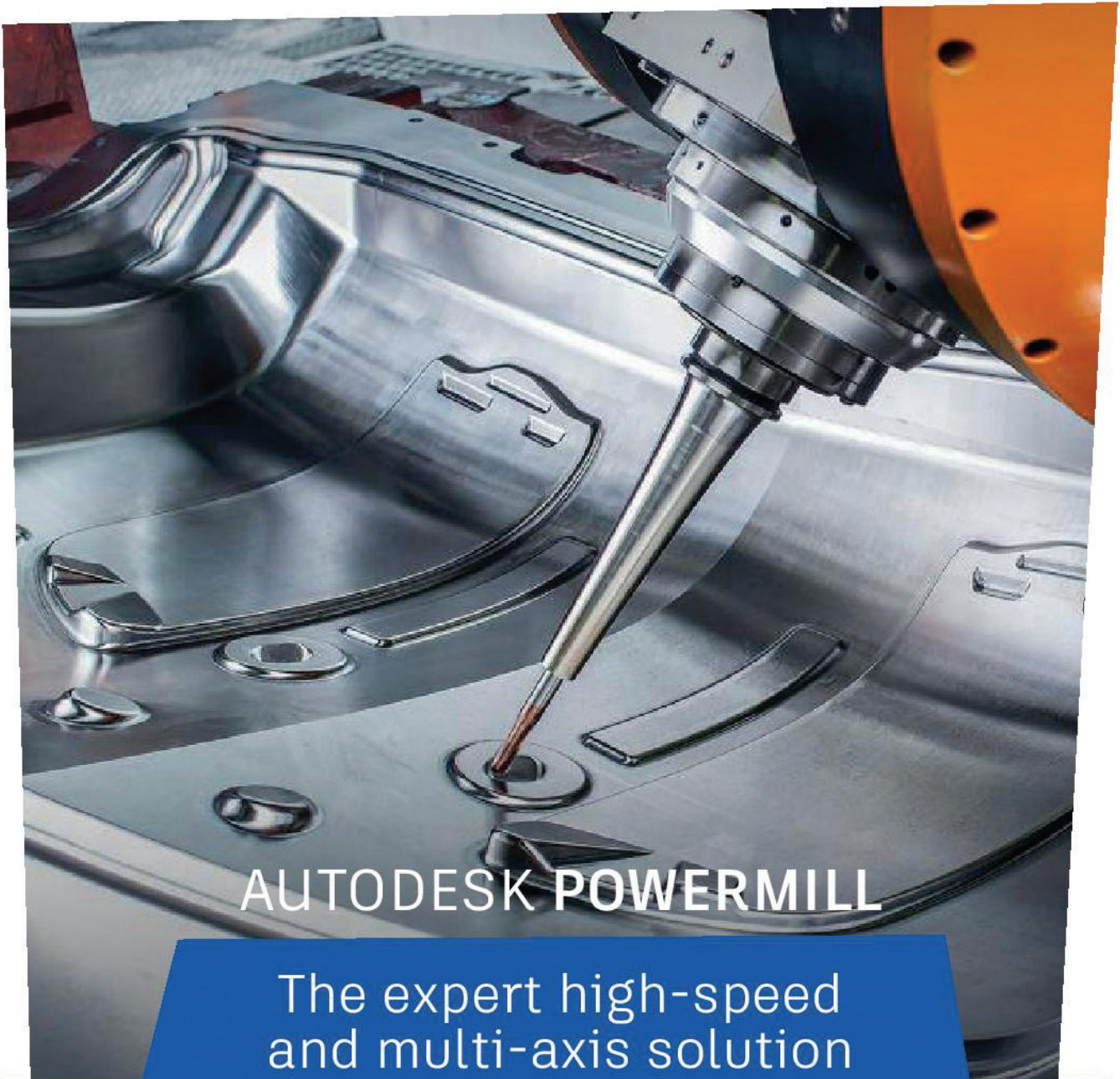
The Metal Industries Research and Development Centre (MIRDC) was established in 1963 by the United Nations and is one of the major research institutes with focus on metal industries and its related technologies, including medical device and care, automotive - mainly for chassis, mold & die micro machining for electronics products and micro parts, metal fabricated products, high value-added equipment for semi-conductor, energy and biotechnology. MIRDC implements around 1,200 projects, trains about 14,000 persons, and completes 18,000 cases of tests and certifications annually.

Dr. Ching-Ming Chen received his B.S., and M.S. in Mechanical Engineering from National Chung Hsing University and National Taiwan University, respectively, and Ph.D. in Engineering Science and Technology from National Kaohsiung First University of Science and Technology. He also obtained the certification of project management from International Project Management Association in 2007.

He joined the Metal Industries Research and Development Centre (MIRDC) in 1986 and was promoted from Engineer, Chief of Industrial Service, Director of Taipei Department, Regional R&D Department and Industrial Updating Service Department to Vice President. During his 29 years with MIRDC, he specialized in the management, metal forming, mold & die, testing and certification, service-oriented manufacturing cluster, aviation, and medical device.

Dr. Chen also serves as chief project director of many key projects supported by government in the fields of heavy transportation industries, biotech & medical device industries cluster, the quality harmonization on cross-strait medical devices, industrial mold technology, automation & equipment, and DC brushless motor drive & control technology. Additionally, he has been appointed as Director of Committee for Aviation Industry Development, Ministry of Economic Affairs.

He is also proactively engaged in interaction with the industrial associations and has served as the Director of Taiwan Aerospace Corp, AIR ASIA Co., Ltd., Chinese Testing and Certification Association, PIHSIANG Sencare Co., Ltd. and Taiwan Implant Technology Co., Ltd., the Vice Chairman of Taiwan Light Metals Association, and Straits Technology Exchange Association, the Managing Director of Asia Pacific IOT Association, as well as the Managing Supervisor of Welfare Organization for the Elderly, Taiwan, ROC.



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## TECHNOLOGY THRU THE YEARS

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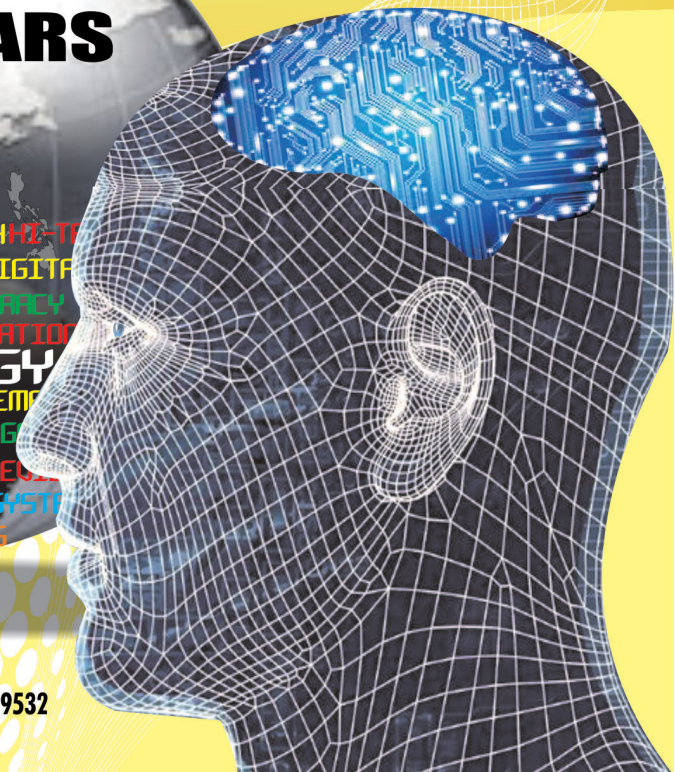
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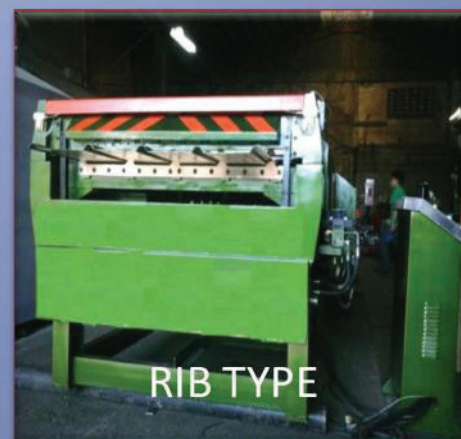
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 Food, Grain, Cheese, & Dairy NIR Analyzers, Portable Octane and Cetane Analyzer	 Torgo II – Torque Testing Systems, Bearing Inspectors	 Quality and Process Control Systems for the Packaging Industry	 Cerintcoat Hoods, Hot and Cold End Coatings	 KLEENMOLD Lubricants	 Machine Condition Monitoring	 Squeeze Rubber Blades	 Electric Forehearth Electric Boosting, Electrode Holders, Bubbler Systems,	 Lehrs, Tempering Line-Belt-Spindels, Stackers, Cross Conveyors, Palletizers, Batch Plant etc.	
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ORDINARY CORRUGATED



TILESPAN

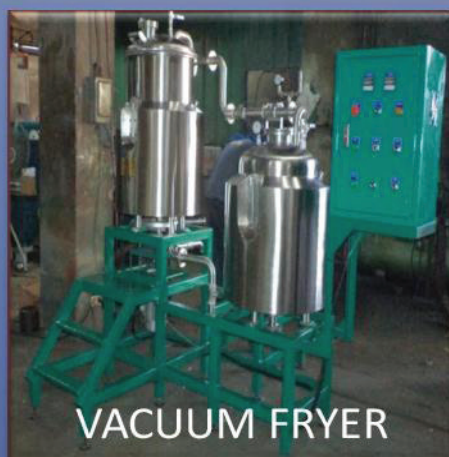


RIB TYPE

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## 2016 METALS AND ENGINEERING WEEK (12-18 June 2016)

The Metals Industry Research and Development Center is proud to press-stud the following events for the metals and engineering industries:

Date	Time	Activities
13 June 2016, Monday	8:00 am – 11:00 am	Holy Mass <b>Venue:</b> MIRDC Access Road  Launching of the New DOST South Gate and Unveiling of MIRDC Marker  Blessing Ceremony
	1:00 pm – 4:00 pm	Awarding of Champions/Winners 1 <sup>st</sup> MIRDC Skills Olympics <b>Venue:</b> Platinum Auditorium, 2 <sup>nd</sup> Floor, Die and Mold Solution Center
14 June 2016, Tuesday	4:00 pm – 7:00 pm	Organizational Meeting for 2017 M&E Skills Olympics
	11:00 am – 5:00 pm	M&E International Conference <b>Theme:</b> 50 years of MIRDC: Half a Century of Partnership with the Metals Industry <b>Venue:</b> Ballroom 1 & 2, 8 <sup>th</sup> Floor, Crimson Hotel, Alabang, Muntinlupa City  <b>International Speakers:</b> Engr. Jong-Deok Kim – Korea Institute of Industrial Technology Dr. Kristian Arntz – IPT, Fraunhofer, Germany Dr. Yong-Taek Im – Korea Institute of Machinery and Materials Dr. Ching-Ming Chen – MIRDC, Taiwan
15 June 2016, Wednesday	5:00 pm – 9:00 pm	Awarding of MIRDC Partners Launching of MIRDC Coffee Table Book Awarding of Legacy Trophy Thanksgiving Dinner and Entertainment
	8:00 am - onwards	The MIRDC Homecoming 2016 (The <b>E</b> X- <b>M</b> IRDC <b>E</b> MPLLOYEES <b>N</b> ETWORK) <b>X</b> PLORE   <b>X</b> CITE   <b>X</b> CHANGE   <b>X</b> TEND   <b>X</b> PAND   <b>X</b> CEL <b>Venue:</b> Platinum Auditorium, 2 <sup>nd</sup> Floor Die, and Mold Solution Center
16 June 2016, Thursday	9:00 am – 12:00 nn	Exchanging of Information to further Collaboration between MIRDC and Invited Foreign Institutions <b>Venue:</b> New Boardroom, 2 <sup>nd</sup> Floor, Laboratories Building
	9:00 am – 9:00 pm	MIRDC 50 <sup>th</sup> Anniversary/Employees' Day Celebration <b>Theme:</b> MIRDC @50: Gold at its Finest <b>Venue:</b> Taguig City University Auditorium
17 June 2016, Friday		

# M&E INTERNATIONAL CONFERENCE

**Theme: 50 years of MIRDC : Half a Century of Partnership with the Metals Industry  
JUNE 15, 2016, CRIMSON HOTEL, ALABANG, MUNTINLUPA CITY**

11:00	REGISTRATION	
11:30 - 1:00	LUNCH	
1:00 - 1:30	PHILIPPINE NATIONAL ANTHEM	
	WELCOME REMARKS	<b>ENGR. ROBERT O. DIZON</b> <i>EXECUTIVE DIRECTOR, METALS INDUSTRY RESEARCH &amp; DEVELOPMENT CENTER (MIRDC)</i>
	MESSAGE	<b>HON. MARIO G. MONTEJO</b> <i>SECRETARY, DEPARTMENT OF SCIENCE &amp; TECHNOLOGY</i>
1:30 - 2:15	INTRODUCTION OF 1 <sup>st</sup> RESOURCE SPEAKER	<b>ENGR. RODNEL O. TAMAYO</b> <i>CHIEF, MATERIALS &amp; PROCESS RESEARCH DIVISION, MIRDC</i>
	DEVELOPMENT OF KOREAN FINE BLANKING TECHNOLOGY AND INDUSTRIES	<b>ENGR. JONG-DEOK KIM</b> <i>PRINCIPAL RESEARCHER - DIES &amp; MOLDS TECHNOLOGY GROUP, KOREA INSTITUTE OF INDUSTRIAL TECHNOLOGY</i>
2:15 - 3:00	INTRODUCTION OF 2 <sup>nd</sup> RESOURCE SPEAKER	<b>ENGR. FRED P. LIZA</b> <i>CHIEF, PROTOTYPING DIVISION, MIRDC</i>
	TOOL AND DIE INDUSTRY OF GERMANY, A DEVELOPMENT MODEL	<b>DR. KRISTIAN ARNTZ</b> <i>HEAD OF DEPARTMENT - LASER MATERIALS PROCESSING, FRAUNHOFER INSTITUTE FOR PRODUCTION TECHNOLOGY, GERMANY</i>
3:00 - 3:15	--- INTERMISSION NUMBER/ SNACKS---	
3:15 - 4:00	INTRODUCTION OF 3 <sup>rd</sup> RESOURCE SPEAKER	<b>ENGR. JONATHAN Q. PUERTO</b> <i>DEPUTY EXECUTIVE DIRECTOR - RESEARCH &amp; DEVELOPMENT, MIRDC</i>
	R & D COLLABORATION MODEL OF KIMM	<b>DR. YONG-TAEK IM</b> <i>PRESIDENT, KOREA INSTITUTE OF MACHINERY AND MATERIALS</i>
4:00 - 4:45	INTRODUCTION OF 4 <sup>th</sup> RESOURCE SPEAKER	<b>DR. AGUSTIN M. FUDOLIG</b> <i>DEPUTY EXECUTIVE DIRECTOR - TECHNICAL SERVICES, MIRDC</i>
	MIRDC'S ROLE IN THE INDUSTRIAL DEVELOPMENT OF TAIWAN	<b>DR. CHING-MING CHEN</b> <i>ACTING PRESIDENT, METAL INDUSTRIES RESEARCH &amp; DEVELOPMENT CENTRE (MIRDC, TAIWAN)</i>
4:45 - 5:00	---- GROUP PHOTO ---	
5:00 - 6:30	AWARDING OF MIRDC PARTNERS	<b>DR. DANILO N. PILAR</b> <i>CHIEF, TECHNOLOGY DIFFUSION DIVISION, MIRDC</i>
6:30 - 6:40	LAUNCHING OF MIRDC COFFEE TABLE BOOK	<b>LINA B. AFABLE</b> <i>CHIEF, TECHNOLOGY INFORMATION AND PROMOTION SECTION, MIRDC</i>
6:40 - 7:00	INTRODUCTION-LEGACY TROPHY AWARD AWARDING OF LEGACY TROPHY MESSAGE FROM AWARDEE	<b>DR. AGUSTIN M. FUDOLIG</b> <b>SELECTION COMMITTEE</b>
7:00 - 9:00	TOAST	<b>ENGR. MARIO G. MONTEJO</b> <b>ROBERT O. DIZON</b>

THANKSGIVING DINNER & ENTERTAINMENT

Note: Each presentation shall be followed by an open forum (15-20 minutes)

Emcees: 1<sup>st</sup> Part - Engr. Mervin B. Gorospe & Ms. Zalda R. Gayahan  
2<sup>nd</sup> Part - Engr. Fred P. Liza & Engr. Rodnel O. Tamayo



## Aerospace Industries Association of the Philippines (AIAP)

### 2016 Set of Officers

<b>John T. Lee</b> <i>President</i>	<i>Board of Trustees</i> <b>John T. Lee</b> <b>Dennis Y. Chan</b> <b>Melvin Dy</b> <b>Cesario Chua</b> <b>Wilfredo Estoque</b> <b>Mercedita G. Abutal</b> <b>Ronald Barcelona</b> <b>Mathew Baxter</b> <b>Ver Farenas</b> <b>Herminigildo Flores</b> <b>Manny Guina</b> <b>Dave Inocencio</b> <b>Alfree Lee</b> <b>Ronaldo Legasto</b> <b>Com. Gilbert Ruelas</b>
<b>Dennis Y. Chan</b> <i>Vice President</i>	
<b>Melvin Dy</b> <i>Secretary</i>	
<b>Cesario Chua</b> <i>Treasurer</i>	
<b>Wilfredo Estoque</b> <i>Auditor</i>	

The AIAP is a non-stock, non-profit and non-governmental organization of small, medium and large enterprises in the Philippine Aerospace and Aviation Industries. AIAP was registered with the Philippine Securities and Exchange Commission last August 1, 2012, Reference SEC Registration No. CN 2012314332.

The AIAP aims to help its members find their customers, partners to serve new export market and achieve sustainable competitiveness in the global arena; providing focused support works, representation and networking services with customers, government, industry, academe, financial institutions, quality and productivity organizations, and other non-governmental bodies.

The primordial role of the Association is geared towards the establishment of the Philippine Aerospace Supply Chain on the following specific fields of intervention:

- Infusion of Technology with partner Technology Providers
- Enhancement of Manpower Knowledge & Skills thru Education and Training with partners in Government and Educational Institutions
- Application of Quality Management Systems of member companies
- Implementation of Productivity Methodologies at Firm level

The general membership currently with 40 companies enlisted constitute entities which are manufacturers, secondary processors, sub-contractors, suppliers, traders, (dealers and importers) based and operating businesses in the country. The members are categorized into the following classifications: Regular, Associate, Honorary, Affiliate, and Individual. There are also 3 Honorary Member government institutions that support the Association thru various programs and projects for the Industry. They are the following:

- Metals Industry Research and Development Center (MIRDC)
- Philippine International Trading Corporation (PITC)
- Philippine Aerospace Development Corporation (PADC)

These Honorary Member government institutions also act as advisors to the current AIAP Board of Trustees.

The AIAP Board of Trustees (BOT) constitute the governing body of the Association. It is composed of 11 BOT's elected by the voting members in good standing. Each BOT holds a term of two (2) years. Once the BOT has been elected, the BOT will then elect the Officers for the Association.

The Trustees are responsible for the development, implementation, and management of the policies and procedures. They have supervision, control, and direction of the affairs of the Association, its committees and publications. They determine policies of the Association or changes therein, promote its objectives, and supervise the disbursement of its funds.

The BOT thru its elected Officers, namely: President, Vice President, Treasurer, Technical Auditor and Secretary conduct its business activities, direct the implementation of programs, delegate certain authority and responsibility to the secretariat and staff of the Association.

Various projects and priority programs are being implemented by the Industry Association. Below are some of the said projects and programs

- Technical Trainings (in Partnership with the MIRDC)
  - Metrology Trainings (Measurement & Calibration)
  - Introduction to AS 9100C (Awareness Training)
  - CNC Machining Trainings (Turning / Milling)
  - Computer Aided Development & Design Trainings



**MDPPA 2016 Set of Officers**

**Rodel I. Pablo**  
*President*

**Joseph N. Adamos**  
*Vice President*

**Alfredo O. Lejano, Jr.**  
*Treasurer*

**Espie N. Custodio**  
*Auditor*

**Jacinto R. Cadugo**  
*Director*

**Vicelyn V. Layno**  
*Secretary General*

*Committee Heads:*  
**Espie N. Custodio**  
*Marketing Committee*

**Jacinto R. Cadugo**  
*Road Safety Committee*

**Andrew G. Angeles**  
*Technical Committee*

**Alfredo O. Lejano, Jr.**  
*Government Committee*

*Committee and Administrative Staff:*  
**Elvira R. Layado**  
**Charmie Y. Aloc**  
**Florenia M. Real**

Based on the basic principles of the Philippine Motor Vehicle Development Program implemented by the Board of Investments, the four (4) major motorcycle manufacturers and assemblers: Honda Philippines, Inc., Kawasaki Motors (Phils.), Corp., Norkis Trading Co., Inc. and Suzuki Philippines, Inc., established in 1973 an association known as the Philippine Motorcycle Manufacturing Program (PMMP).

In 1987, new MVDP guidelines were finalized and program name was, likewise, changed to Motorcycle Development Program (MDP). The Association was given the new name of Motorcycle Development Program Participants Association, Inc. (MDPPA) in 1989.

Eastworld Motorcycle Industries, Corp. (Motorstar) and MCX Motor Phils., Inc. joined the association in 2003 and 2006, respectively. Yamaha Motor Philippines, Inc. and Kymco Philippines, Inc. followed suit in 2008. The current six members of the Association, Honda, Kawasaki, Suzuki, Motorstar, Yamaha and Kymco, are all active participants of the government's Motor Vehicle Development Program (MVDP).

**VISION STATEMENT**

To be the premier motorcycle manufacturers association in the Philippines.

**MISSION STATEMENT**

To provide motorcycle to every Filipino home.

**VALUES STATEMENT**

- Reliability
- Environment-friendly
- Safe Riding
- Technology driven

**Objectives**

- To work Together in intensified market development activities aimed at promoting the widespread usage motorcycles with emphasis on the sports and recreational aspects.
- To encourage and support the establishment and growth of light and medium scale enterprises locally producing motorcycle parts and components in line with government objectives.

**Activities**

- MDPPA organize a yearly exclusive Motorcycle Show.
- Conducts a "Free" Learn to Ride a Motorcycle among the media people every year.
- Participates in Motor shows organized by private organization. Actively participates in the discussion on government policies affecting Motorcycle Industry.
- Coordinates with the Philippine Government to promote environmental campaign, specifically to prevent and control air pollution from motorcycles.


**Philippine Parts Maker Association, Inc.**
**2016 Set of Officers**

<b>Feliciano L. Torres</b> <i>Chairman Emeritus</i>	<b>Yuji Yamamoto</b> <i>PRO Government Relations</i>	<b>Ferdinand I. Raquelsantos</b> <i>Chairman of Ways and Means</i>
<b>Eddie S. Jose</b> <i>Chairman</i>	<b>Rodolfo Olan</b> <i>Board Secretary</i>	<b>Rommel Juan</b> <i>Chairman of Sports and Social</i>
<b>Ferdinand I. Raquelsantos</b> <i>President</i>	<b>John Lee</b> <i>Auditor</i>	
<b>Rafael G. Villarreal</b> <i>Vice President Internal</i>	<b>Satoru Azuma</b> <i>Director</i>	
<b>Vicente Co</b> <i>Vice President External</i>	<b>Tsuyoshi Hyodo</b> <i>Director</i>	
<b>Edmund Araga</b> <i>Vice President Technical</i>	<b>Mitsutaka Kaneko</b> <i>Director</i>	
<b>Rodolfo Olan</b> <i>Secretary</i>	<b>Edwin Gallor</b> <i>Chairman of Membership</i>	
<b>Kwang Tang Dee</b> <i>Treasurer</i>	<b>John Michael Torres</b> <i>Chairman of Education</i>	

Philippine Parts Maker Association, Inc. (PPMA) originally known as Motor Vehicle Parts Manufacturers Association of the Philippines MVPMAP, was established in July 2015 to represent the industry and to provide technical and management support to its members. The Association extremely effective link between the policy-making echelons in the government and the auto parts manufacturing industry. PPMA is also a member of Federation of Automotive Industries of the Philippines, Inc. (FAIP) with a registered membership base of over 113 parts manufacturers out of over 302 industries. PPMA has under its wings part makers of cars who represent multinational companies of repute, including Toyota, Mitsubishi, Isuzu, Honda, and others.



## Metalworking Industries Association of the Philippines Inc. (MIAP)

### 2016 Set of Officers (MIAP National)

**Inesitas L. Palermo**

*President, MIAP - Iloilo Chapter*

**Dominador Y. Lanoy**

*Executive Vice President, MIAP - Davao Chapter*

**Rene I. Dela Cruz**

*Vice President - Luzon, MIAP - Metro Manila Chapter*

**Edson Y. Mateo**

*Vice President - Visayas, MIAP - Cebu Chapter*

**Mario C. Julaton**

*Vice President - Mindanao, MIAP - Davao Chapter*

**Cherry R. Isobal**

*Secretary, MIAP - Iloilo Chapter*

**Hector D. Malonzo**

*Treasurer, MIAP - Metro Manila Chapter*

**James G. Arcenio**

*Auditor, MIAP - General Santos Chapter*

*Trustees:*

**Cipriano M. Vicente**

**Francis S. Celis**

**Raymund M. Paras**

### (MIAP Metro Manila Chapter)

**Lucilito P. Angeles**

*President*

**Hector D. Malonzo**

*Treasurer*

**Nyl B. Lanzuela**

*Trustee*

**Rene I. Dela Cruz**

*Vice President*

**Joseph Alan T. Abrenica**

*Auditor*

**Elven S. Uy**

*Trustee*

**Edison Y. See**

*Secretary*

**Tyronne T. Chan**

*Trustee*

**Nerissa A. Veran**

*Trustee*

The Metalworking Industries Association of the Philippines, Inc. (MIAP) is a trade association of firms engaged in metalworking and related activities. It was first organized in 1978 in Metro Manila to answer the need for a body that can represent the metalworking sector of the mechanical engineering industry with government as well as with other industry sectors, both domestic and international.

MIAP's mission is to work for the development of a truly progressive and dynamic metalworking association that can firmly support the needs of its members and stands as the backbone of the various industries.

MIAP is composed of 15 CHAPTERS throughout the Philippines as follows:

1. Bohol
2. Butuan
3. Cagayan de Oro City
4. Cagayan Valley Reg. 2
5. Cebu
6. Dagupan
7. Davao City
8. General Santos City
9. Iligan City
10. Iloilo City
11. Kidapawan
12. Metro Manila
13. Negros Occidental
14. Surigao del Sur
15. Zamboanga City



## Philippine Society of Nondestructive Testing (PSNT)

### 2016 Set of Officers

**Edgardo C. Aguilar**

*President*

**Renato T. Banaga**

*Vice President*

**Estrella D. Relunia, Ed.D.**

*Treasurer*

**Gonzalo S. Puga**

*Secretary*

*Board of Directors:*

**James F. Porter, Jr.**

**June Raymond L. Mariano**

**Dante A. Bernardo**

**Concepcion Raspado**

**Gerald S. Gallardo**

**Roland R. Cabasa**

**Isidro D. Millo**

The Philippine Society of Nondestructive Testing, Inc. (PSNT) is an organization composed of engineers, technologists, professionals and technicians engaged in and/or interested in the practice of Nondestructive Testing (NDT) techniques and methods.

The PSNT was officially organized on September 28, 1979 and its Constitution and By-laws was formally ratified on December 17, 1979. The PSNT is registered with Securities and Exchange Commission (SEC) as a non-profit, non-stock organization.

As defined in its Constitution, the PSNT was established for the purpose of:

- a. advancing scientific, engineering, and technical knowledge in the field of NDT through education, research, and the compilation and dissemination of relevant information useful to the membership and beneficial to the general public.
- b. establishing NDT standards and procedures for qualification and certification of NDT practitioners; and
- c. establishing linkages with government institutions and other technical and scientific organizations in the dissemination and exchange of information in enhancing the promotion of an advancement and recognition of NDT in the Philippines.

The PSNT acts as the advisory body to the Philippine National Certifying Body for Nondestructive Testing (PHIL-NCB-NDT) on the qualification and certification of NDT personnel in accordance with PNS/ISO-9712:2006.

**2016 Board of Directors**

**Philip C. Ang**  
*President*

**Angel P. Serra III**  
*Vice President*

**Virgilio F. Lanzuela**  
*Secretary*

**Marcelino T. Yu**  
*Treasurer*

**Brian S. Ang**  
*Auditor*

*Trustees:*

**Luis Antonio T. Fuster**

**Hector D. Malonzo**

**Agustin M. Fudolig**

**Jesus V. Celis**

**Hector U. Villanueva, Jr.**

**Gregorio A. Oliveros**

**Jimmy T. Chan**

**Jaime L. Diaz**

The Philippine Die and Mold Association (PDMA) was established to formulate, initiate, and advocate policies and strategies for the rationalization of the mold and die industry, review industry policies, and monitor their implementation. It seeks to promote the rapid modernization of the Philippine die and mold industry by fostering closer cooperation between and among the members of the industry, the academe, and the government and by serving as catalysts in consolidating their efforts and in mobilizing available resources with the end view of enhancing the capability of the die and mold industry to meet the demands of the local and export market under the standards of global excellence.

The PDMA holds a biennial exhibition and conference that showcases the machineries, tools, equipment, products, processes and services. The PDMEX (formerly PDMAEC) incorporates allied exhibits for Automation, Robotics and Control, Machine Tools, Metal finishing, Metrology, Outsourcing and Engineering, Plastics, Welding and Sheet Metals.

The PDMA was organized on August 19, 1995 and duly registered with the SEC on October 26, 1995. It is affiliated with the Federation of Asian Die and Mold Associations (FADMA). Its structure is composed of seven (7) sectors as follows:

1. Die Casting and Forging
2. Electronics and Semiconductor Tooling
3. Government (represented by MIRDC and BOI)
4. Metal Stamping
5. Plastics, Rubber and Packaging
6. Technological Resources
7. Machining and Fabrication


**Philippine Iron and Steel Institute (PISI)**
**2016-2018 Set of Officers**

**Roberto M. Cola**  
*President*

**Benhur Go**  
*Vice President – Institute Affairs*

**Romulo Salanga**  
*Vice President – Economic Affairs*

**Joel Ronquillo**  
*Vice President – Technical Affairs*

**Wellington Y. Tong**  
*Vice President – International Affairs*

**Jose Rey S. Batomalaque**  
*Board Secretary*

**Sofia C. Tundag**  
*Treasurer*

**Ronald Joel Magsajo**  
*PRO*

*Board Members:*

**Henry Lieuson**

**Mauro Cervantes**

**Alejandro Dumaliang Jr.**

**Alex Dumaliang**

**Alvin Cheng**

**Jimmy Chan**

**Oliver Silan**

**Ricardo Yu**

*Ex-officio member:*

**Dr. Agustin A. Fudolig**

The Philippine Iron and Steel Institute (PISI) is created to help bring about the global competitiveness and sustainable growth in the Philippine iron and steel industry to enable the latter to be an effective partner in national development.

The PISI was established on May 8, 1963 by a group of Filipino industrialists and registered it with SEC on July 8, 1963 as a non-stock, non-profit corporation. Due to mounting problems that beset the iron and steel industry in 1971, the PISI was revitalized with a renewed working partnership between government and private sector wherein the MIRDC became an ex-officio member.

At present, the PISI is governed by 15-member Board of Trustees representing various sectors as follows:

- Long products – melters, re-rollers, wire rod, wire products, etc.
- Flat products – galvanizers, pre-painted sheets, pipes, containers, cans, etc.
- Traders – raw materials, manufacturers, ferro-alloy, sinter, gases, etc.
- Foundry, forging, metal work

Today, the PISI is the country's premiere organization that is recognized by the government as representing the country's iron and steel industry. It shall also be the ideal catalyst to bring about a sustainable and globally competitive domestic capability to produce and manufacture iron and steel products in the Philippines.



## Philippine Welding Society (PWS)

### 2016 Set of Officers

**Roberto M. Dela Cruz**  
*President*

**Reynaldo L. Dela Cruz Jr.**  
*Vice-President*

**Ma. Eliza V. Mendez**  
*Secretary*

**Isidro Millo**  
*Treasurer*

**Gerald S. Gallardo**  
*Auditor*

**Ernesto B. Policarpio**  
*Public Relations Officer*

**Eric J. Montes**  
*Ex-Officio Official*

*2015-2017 Board of Trustees and Committees:*

**Eric J. Montes**  
**Bernardo A. Benito**  
**Reynaldo L. Dela Cruz, Jr.**  
**Edralin C. Icabales**  
**Ma. Eliza V. Mendez**  
**Rolando R. Ortañez**  
**Galileo S. Santos**  
**Fernando M. Opeda**

The Philippine Welding Society (PWS) is committed to professionalize welding practice in the country.

Philippine Welding Society started as a vision of various industry professionals whose aim is to advance the science and professionalize the practice of welding in the country.

On September 19, 1991, encouraged by the government, business sector, educators and practitioners, twelve founding members from construction, manufacturing and inspection companies bonded together and established the Philippine Welding Society (PWS) which was registered as a non-stock, non-profit organization with the SEC on February 13, 1992.

The foremost objective of the PWS is to promote the advancement of the science and practice of welding including matters related to standardization, public safety and health. It also provides a forum for exchanging ideas and opinions on the practice of the welding profession and skills development through workshops and seminars.

The activities of PWS include conduct of seminars and workshops in welding technology topics and conduct of topics related to certification of welding inspectors. The PWS also holds an Annual Welding Competition especially among Tech Voc learning institutions.



## Philippine Metalcasting Association, Inc. (PMAI)

### 2016 Set of Officers

**Jose T. Marcelo Jr.**  
*Honorary President*

**Jerry Hui**  
*President*

**Marcelino Barandino**  
*Vice President*

**Eddie Go**  
*Secretary*

**Wilson Ong**  
*Treasurer*

**Harvey Uy**  
*Asst. Treasurer*

*Committee Chairpersons:*

*Finance:* **Jerry Hui**

*Membership:* **Marcelino Barandino**

*Information:* **Lemuel N. Apusaga**

*Ways And Means:* **Wilson Ong**

*Manpower:* **Loreto Matibag**

*Technical:* **Tomas Merdegia Jr.**

*Trade:* **Eddie Go**

*Board of Directors (2015-16)*

**Jerry Hui**  
**Marcelino Barandino**  
**Eddie Go**  
**Wilson Ong**  
**Harvey Uy**  
**Lemuel N. Apusaga**  
**Ernesto Ang**  
**Tomas Merdegia Jr.**  
**Audie Fabelico**  
**Kim Sin Ongkauko**  
**Napoleon Tanganco**  
**Valentin Go**  
**Joseph Navarro**  
**Loreto Matibag**  
**Danny Panganiban**

The Philippine Metalcasting Association, Inc. (PMAI) envisions a well developed Philippine metalcasting industry that is at par with the best in the world, engineered, molded, and shaped by PMAI and skillfully steered into and through the present millennium, with PMAI at the helm as a widely recognized and highly regarded institution for improving productivity and industrial prosperity.

PMAI started as the Philippine Foundrymen's Society (PFS) in 1964 with 30 members. In 1972, the association was renamed the Philippine Foundry Society wherein its objectives were broadened to include the economic improvement of the industry. In order to embrace all those involved in metalcasting, the PFS was transformed into the PMAI which was registered with the SEC on November 27, 1990. Membership has expanded to include foundries and diecasters alike.

Over the years, PMAI has represented the metalcasting industry of the country in international missions, training and trade fairs in Japan, Russia, Poland, Taiwan, Netherlands, Germany, Belgium and China.



## Society of Manufacturing Engineers (SME)

### 2015 Set of Officers

**Rostico F. Morales**  
*Chapter Chair*

**Mario E. Go**  
*Chair-Elect*

**George L. Siy**  
*Chapter Secretary*

**Saturnino C. Dy, Jr.**  
*Chapter Treasurer*

*Directors:*

**John T. Lee**  
**Hanz Jordan Chan**  
**Martin B. Yabut III**  
**Ong Wai Hung**  
**Edgardo V. Eleria**  
**Lionel S. Chuacokiong**  
**Victoriano T. Yap**  
**Oscar G. Unas**  
**Jennet C. Tam**  
**Augusto C. Soliman**

*Ex-Officio:*

**James C. Ang**

For more than 77 years, the Society of Manufacturing Engineers (SME) has been the place Where Manufacturing Comes Together. Founded in 1932 with 33 members, the organization was originally named the Society of Tool Engineers. A year later, it was renamed the American Society of Tool Engineers. It finally became the Society of Manufacturing Engineers in 1969. Formed amid the Great Depression by a group of tool engineers and master mechanics, the organization looked to collaborate on how to build what would give the Motor City its name - the automobile.

Today, SME is the world's leading professional society supporting manufacturing education. Through its member programs, publications, expositions and professional development resources, SME promotes an increased awareness of manufacturing engineering and helps keep manufacturing professionals up to date on leading trends and technologies. Headquartered in Michigan, SME influences more than half a million manufacturing practitioners and executives annually. The Society has members in more than 70 countries and is supported by a network of hundreds of technical communities and chapters worldwide. SME's members hail from diverse manufacturing industries, including aerospace and defense, automotive and transportation, medical and many, many more.

The Society of Manufacturing Engineers Manila Chapter 165 was started in the Philippines by a handful of entrepreneurs, engineers and manufacturing engineers more than 50 years ago. It was the second off-shore chapter (North American continent) to be established. The first was Australia.



## Mechatronics and Robotics Society of the Philippines (MRSP)

### 2015-2017 Set of Officers

**Gamaliel F. Itao, PEE, M.Entrep.**  
*Chairman*

**Joel B. Bajador, PECE, MBA, ACPE**  
*President*

**Edwin J. Calilung, MSME, Dr. Eng.**  
*Vice-President – Robotics*

**Philip Marvin D. Joven, REE**  
*Vice-President – Mechatronics*

**Franklin D. Quiachon, ECE**  
*Secretary*

**Rod T. Pecolera, PEE, MBA, ACPE**  
*Treasurer*

**Ariel P. Duran, REE, MBA**  
*Auditor*

**Edwin A. Sta. Maria, PECE, MBA**  
*PRO*

*Advisers:*

**Dr. Elmer P. Dadios, Ph.D**  
**Dir. Robert O. Dizon**

*Trustees:*

**Augusto C. Soliman, PME, MTM**  
**Benjamin V. Morales, PME, MBA**  
**Ricky V. Bustamante, PECE, MECE**  
**Mariciel M. Teogangco, MSECE, MBA**  
**Divina Gracia D. Ronquillo, PECE, ASEAN ENGR.**  
**Cecilio P. Repollo, RME**  
**Fred P. Liza, RME**

The Mechatronics and Robotics Society of the Philippines is a group of people who are committed to the advancement of mechatronics and robotics technology in the Philippines through research and development, innovations and sharing of expertise, information and experience. This society has a multi-level membership to ensure the integration of mechanical, electrical, electronics and computing technology, skills and knowledge in the production of automated and intelligent machines and equipment.

**VISION:**

"To be the leader in the advancement of Mechatronics and Robotics Technology, Research and Application in the Philippines and ASEAN Region within 5 years."

**MISSION STATEMENT:**

- To unite experts, professionals and hobbyists in promoting nation building through advancement, research and continuous innovation in mechatronics and robotics technology.
- To create opportunities for its members in response to the needs of multi-sectoral industries that will lead to sustainable national growth towards global competitiveness.
- To lead in certifying mechatronics and automation professionals, technicians and practitioners which will complement globally recognized national certification.



**Contact and Non-Contact Measuring Machines**



**For Large Object Measurement**



**Bandsaw Blades**



**X-ray Systems**

**Environmental Test Chambers / Ovens**



**Microscopes**



**XRF**



**Air and Liquid Particle Counters**



**COMPANY PROFILE**

**MAEDAN ENTERPRISE, INC.**, established in 1988, is engaged in the distribution of technologically-advanced and well-known brands of equipment, materials and consumables to the electronics, semiconductor, automotive, pharmaceutical, consumer and food industries. We provide after-sales service support for the equipment we distribute.



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*"Working Together to give you Quality Products and Services."*



# VJF Precision Toolings Corp.

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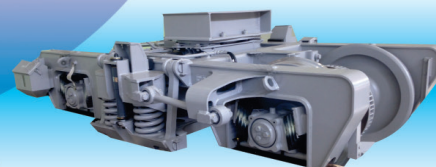


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## MIRDC 50<sup>th</sup> Anniversary Celebration

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# MIRDC 50<sup>th</sup> Anniversary Celebration

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*Accelerating Towards a Competitive Auto Parts Manufacturing Industries*

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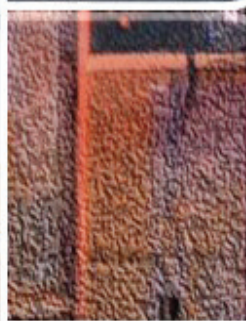
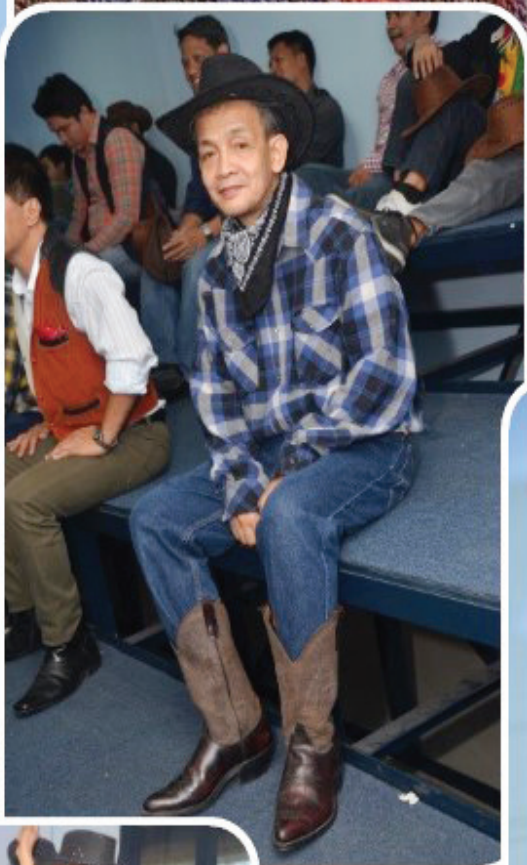


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# MIRDC 49<sup>TH</sup> ANNIVERSARY

*"MIRDC Goes Western"*



*June 19, 2015*

# MIRDC 49<sup>TH</sup> ANNIVERSARY

*"MIRDC Goes Western"*



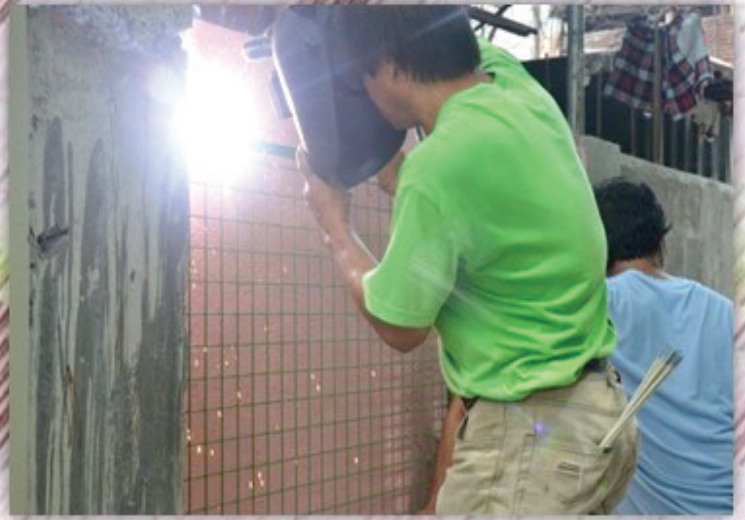
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# The M&E Industries through the Eyes of Secretary Mario G. Montejo



*An engineer by profession and an innovator at heart, he has already turned ideas into actual products, which he was then able to exploit as businesses through continued use of engineering and innovation.*

Metals and engineering are two very important foundations of manufacturing. One can never underestimate the critical role that these two play in the success of the manufacturing industry, which is a driver of any nation's economy.

Equally important as the metals, engineering and allied industries are the people who actually take the reins and step up to do what must be done to contribute to the industries' development. In this world, there are quite a number of men and women who are brave enough to rise above the challenge of making a difference. They are the ones who truly devote time and effort to develop a craft, pursue a passion, and relentlessly strive to achieve goals and translate their achievements into benefits that will be felt by all.

The Honorable Mario G. Montejo, presently the Secretary of the Department of Science and Technology (DOST), is one of them. An engineer by profession and an innovator at heart, he has already turned

ideas into actual products, which he was then able to exploit as businesses through continued use of engineering and innovation.

Born in a family of lawyers, the young Mario was set out to be his own man. He did not dream to be a lawyer like his father and his grandfather. His strength was in Math. He especially loved Physics, in fact he first dreamed to go to space. As he grew older, he realized careers in Physics were very limited. The next best option he had was to take up BS Mechanical Engineering at the University of the Philippines Diliman. It was the 1970s, time of Martial Law. Back then, college life according to Mr. Montejo was turbulent. Some students rebelled against the government and opted to move to the mountains. For some of those who stayed behind, the societal unrest can be likened to crossroads. Mr. Montejo was among those who did not find rebellion as an option. He stayed, finished college, and, given the volatile Martial Law situation

and the impact it had on the Filipinos, thought of how he can make use of his engineering and technical background to be of help to a wounded nation.

He joined the private sector after college. He worked as a Resident Mechanical Engineer at the DCCD Engineering Corporation, and later at the Construction Development Corporation of the Philippines. Though he worked as an employee for a few years, the flare of being an innovator who works well outside the confines of wall offices and is more comfortable if given control over his time, remained intense in him. Following the dictates of his heart, Engr. Montejo went into entrepreneurship in 1978.

His experiences as an entrepreneur made him embrace engineering and all the good stuff that comes with being an engineer all the more. Though there were difficult times, especially in matters that involved financial resources and logistical support, he managed to remain in business. These difficult times only served to inspire him more. In fact, he put up his own company with the help of his wife, Mrs. Maria Rosario O. Montejo, in 1986.

Engr. Montejo was President of the Northwest Steel/MK Screens, Inc. from 1989-2005. His desire to utilize local technologies and make them work compelled him to come up with the local version of the well screen. 'Imported *yun dati e*. I developed an equipment *na gumagawa ng* well screen. For the first time, *meron na tayong* locally-developed well screen,' Sec. Montejo shared with enthusiasm. Long before he was sworn into office as DOST Secretary, his guiding belief was 'Local technologies work.' An engineer in the truest sense of the word, he made it a point to really make this happen. From 2006-2010, Engr. Montejo was President of the NWSteel Technologies, Inc. and continued to fulfill his passion to innovate. In 2008, the innovative Mr. and Mrs. Montejo ventured into another family business, this time to set-up their own theme park named tree Top Adventure, Inc. which has branches in Subic and in Baguio.

His achievements and contributions led to a number of recognitions: Gold Medal Award for Creative

Research from the Filipino Inventors Society in 1989; Outstanding Alumnus from the UP College of Engineering in 2000; and Outstanding Alumni for Professional Achievement from the Tau Alpha Fraternity, UP College of Engineering in 2010.

All that he has accomplished, from making a big name in the private sector, putting up his businesses, and gaining recognition among his innovator peers and the academic community, will surely make any person very proud. But Engr. Montejo's string of accomplishments is yet to grow longer and even more remarkable. In 2011, he was offered a seat in the cabinet of President Benigno S. Aquino III as Secretary of the Department of Science and Technology. At that point he recalls that being appointed DOST Secretary 'was life-changing, in a way, because I had to leave the business, my wife had to take over. *Pero tamang tama lang kasi malalaki na ang mga anak namin*, and they were ready to take over. Perfect timing.' When asked whether he had apprehensions, or if he ever got scared or stressed with the huge responsibility, he replied, 'I was surprised. I was in the private sector. I was more of an innovator.' The soft-spoken Secretary jokingly added, 'Never ako gumawa ng speech before ... Tapos all of a sudden, Secretary ka na.. E di "just do it," sabi nga ng Nike.'

The DOST went into full throttle under the leadership of Sec. Montejo (SMGM). The Metals Industry Research and Development Center (MIRDC), for instance, was suddenly thrown into the fast-paced, hard-action aspect of government service. This was something that the Center was looking forward to, because it had to shape up – improve and reinvent itself, take the lead in achieving organizational excellence – in order to be more effective in serving the country's metals industry.

It is definitely the mechanical engineer in him speaking when he said, 'the MIRDC plays a big role. *Nandun sya sa areas na* involved *sa* foundations of manufacturing: tool and die, heat treatment, foundry, gear making.' To elaborate, he cited the Food Innovation Center (FIC) as an example. 'The FIC,' according to



SMGM visits the foundry (L); SMGM looks on during the demonstration of the CNC Plasma Cutter (R)



*NIDEC delegates' visit to the MIRDC*

him, 'will produce numerous products. They will be needing equipment. They will be needing the infrastructure. *Kailangang i-build up para maging mas relevant lalo!*' He says that the MIRDC plays a vital role in building one very crucial driver of the economy.

In his term as DOST Secretary, the MIRDC was involved in major programs such as the Machine Building, Advanced Transportation, Disaster Mitigation, and High Impact Technology Solutions. The component projects under each program have varying objectives based primarily on the specific issue that they are intended to address. But the underlying motive that unifies all these initiatives is the aspiration to boost our manufacturing capabilities. One might ask, how does upgrading the manufacturing industry fit into the big picture of nation-building? As the head of the agency that functions as the repository of information and knowledge in science and technology, SMGM has his eyes fixed on making the foundation of manufacturing stable.

He mentioned the NIDEC visit to the MIRDC. Recognized word-wide as the industry leader when it comes to the manufacture of small motors, NIDEC delegates were really happy to see our tool and die and mold-making facilities. SMGM beams with pride as he recalled this experience, because the foundations of even the most cutting edge technologies, still lie on the same basic facilities. The Secretary was pleased to say that the need for facilities of even the largest companies in the world remain unchanged. '*Tuwang-tuwa sila na meron pala tayong facilities that can as-*

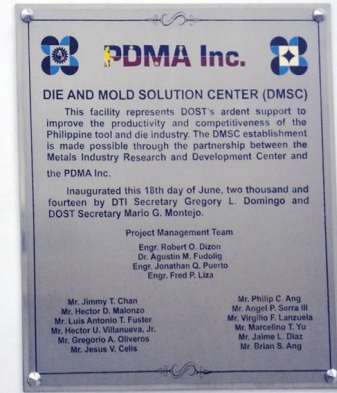
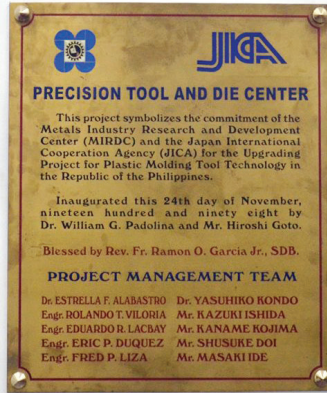
sist them... In a way, the DOST can attract investments here in the Philippines because we have the MIRDC, we have the facilities *na pwede nilang magamit*. That is a form of incentive *para dito na sila maglocate!*

SMGM radiates with enthusiasm when he speaks about the DOST and all that it has to offer to the country. 'We still need to expand our capabilities and facilities some more, especially on robotics... We can be very competitive because the Filipinos can make the most cost-effective robots.'

Industries are becoming more and more complex now that production networks and value chains are not limited by boundaries, and SMGM knows exactly how to harness science, technology and innovation so that the Philippines will be recognized among the key players in a world that is coming closer together. 'Manufacturing will always go to a location *kung saan sya cost-effective, kung saan pinakamaganda ang productivity*. Essential to the productivity are the robots. *Malapit na tayo*, we could be one of the most cost-effective locations because of our capabilities in robotics.'

SMGM further tells, 'We have the skills. We have to have the technology... *Meron na tayong electronic devices, semicon, paggawa ng gears, meron tayong sensor development*. So all the components of automation, of robotics, *meron na sa DOST*. Those are the capabilities, the facilities and assistance that we can offer to the companies.

The encounter with the NIDEC is just one of the instances that we were able to wow our foreign guests.



The JICA and DMSC markers hang on the wall of the Die and Mold Solution Center (DMSC)

The government usually invites officials of agencies like the Department of Trade and Industry, the Philippine Economic Zone Authority, and the Department of Finance every time a big foreign company visits the country because these agencies can offer incentives to attract multinationals to invest here. 'For the first time, *natawag ang* DOST. What can we offer? We can offer our facilities, and surprisingly, it is important to the investor in making decisions; shares the very pleased Secretary.

No matter how complicated the world turns out to be, even with the advent of the most sophisticated modeling, we have to go back to metals. Sec. Montejo, an engineer, and an innovator, asserts with conviction, '*Napaka-importante ng* MIRDC. Tool and die is very basic, *pero* it will always be there.' He again mentioned other services at the Center: surface engineering, heat treatment, gear making. These are technologies, according to SMGM, that will enable our developers.

'We have so many agricultural resources *na pwede natin iprocess*. But if you develop a process, *kailangan din natin magdevelop ng equipment para gumawa ng process na yun*. *Magagaling yung mga gumagawa natin ng process, so kinakailangan may katapat na capability para gumawa ng equipment*.'

Capability-building is evidently on top of the good Secretary's list of priorities, and his program portfolio can attest to this. His all-out support to capability-building is boosted by his belief in the kind of talents and skills that our local manpower possesses. 'The creativity is all over. *Nakita naman natin the way they develop food products, ganun din naman pag gawa natin ng equipment. Pero pag tulong tulong lahat yan, pag naging isang integrated innovation ecosystem na, everybody has a role e. Pero everybody should contribute. Ang MIRDC enabler ito e – nagdedevelop ng process, nagdedevelop ng mate-*

*rial, even yung raw materials ng agri may ginagawa din silang innovation to be more efficient in producing all these ... pag pinagsama sama natin lahat ito hopefully maging seamless na ang innovation and engineering, grabeng ka-competitive ang Pilipinas.*

SMGM drops by at the MIRDC more often than just every now and then. He makes it a point to be at the Center to join in major activities. He is very particular about the marker at the MIRDC's Die and Mold Solution Center, the old one given in 1998 by the Japan International Cooperation Agency (JICA) in recognition of the MIRDC's capabilities in tool and die. This marker really got his attention because the Secretary delightfully commented that beside this JICA marker is a new one, symbolizing the government's ardent support to the improvement of the productivity and competitiveness of the local tool and die industry. '*Mas malaki pa yung ating programa. This time, tayo na. At saka funded pa ng ating government*.'

The DOST's efforts, more particularly the initiatives of the MIRDC, are now catching the attention of the industry. SMGM's term as DOST Secretary allowed him to do more, inspire more, and lead the country to a better path towards global competitiveness. He is surely a cut above the rest, and his valuable gift to the scientific community earned him additional awards and recognitions during his term in office.

He was awarded the Distinguished Alumni in Science and Technology by the UP Alumni Association in 2011; Doctor in Public Administration (Honoris Causa) by the Polytechnic University of the Philippines in 2013; Most Distinguished Alumnus by the UP Alumni Association in 2014; recipient of the House Resolution No. 201, entitled 'Resolution Congratulating Secretary Mario G. Montejo of the DOST for being named as 2014 Most Distinguished Alumnus' by the UP Alumni Association in 2015; recipient of the House Resolution No. 196, entitled 'Resolution Commending the Em-

ployees of the PAGASA Station in Tacloban, Leyte for Loyalty to Their Oath of Office and Dedication to Duty During the Onslaught of Typhoon Yolanda on November 8, 2013, given in 2015; and recipient of House Resolution No. 194, entitled 'Resolution Commending the DOST for Winning the Prestigious Geospatial World Excellence in Policy Implementation Award for 2014, for its Disaster Risk and Exposure Assessment for Mitigation (DREAM) Program, given in 2015, among others.

All these honors tell so much about the kind of leader SMGM is. Surprisingly though, he has both feet planted firmly on the ground. Secretary Montejo, who has already done so much for the metals, engineering and allied industries, and many other economic industries as well, says his inspiration for doing all that he does is the memory of the turbulent life that the country had during his college days. Back then, his options were to rebel against the government and run to the mountains, or stay behind and find ways to

help. He clearly went for the latter choice. *'Paano ka makakatulong?... Pag ganun ang mindset mo, parang simplified na lahat. Ang iniisip mo, paano mo gagamitin ang engineering o technical background para makatulong sa bayan.'*

The M&E industries' position now has grown much better compared to where it was before SMGM came and stirred things up. He is an innovator, and setting up his own business is how innovators are supposed to pursue their passion. But beyond being an innovator, Sec. Montejo is a game-changer, one who has helped the industry realize its potentials. 'We can solve our own problems. We can identify our own technical needs, we can address our own technology gaps. We don't need other people to help us identify our own problems. We can recognize our own problems. We have enough government support to be able to develop programs to address these problems.'

*(L) SMGM joins the celebration of the 2014 M&E Week*



*SMGM during the DMSC ribbon cutting ceremonies, along with (from left) DOST USec. Amelia P. Guevara, DTI Sec. Gregorio L. Domingo, and PDMA President Philip C. Ang.*





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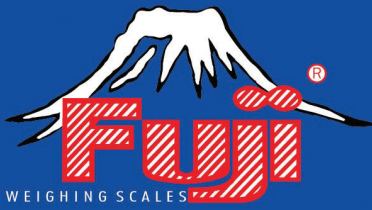
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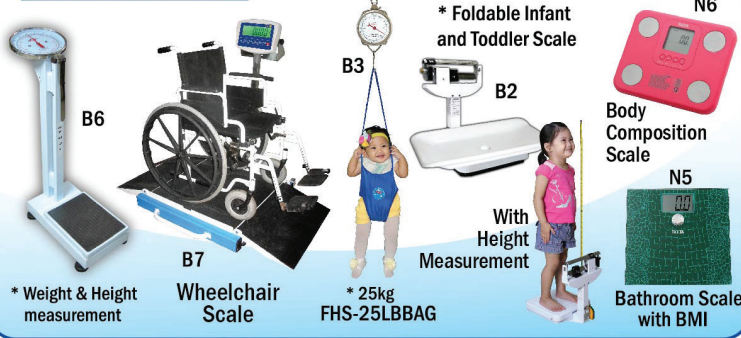


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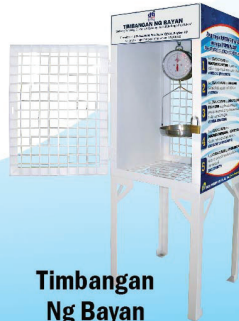


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