



Jeddah Prime Movers

OFFICIAL NEWSLETTER OF PSME-WRSA JEDDAH CHAPTER

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JUNE 2023



By:

Engr. Mark Harold Ramirez

Last March 17, the 2023 Philippine Society of Mechanical Engineer – Western Region Saudi Arabia Jeddah Chapter (PSME-WRSA JC) basketball games were held with enthusiastic players competing in 5v5.

The event promoted healthy sports and fair play among member of PSME-WRSA JC and it was our first sports activity in 2023 organized for our members to be strong, confident, and upbeat through various sports.

With reinforcements coming from our partners, Saudi Air conditioning Manufacturing Company Limited (SAMCO-Juffali) and Saudia Airlines Catering Company, all players demonstrated their skills, sportsmanship, and spirit.

Held at Fawaz Basketball Gym, Al Jaweed District Jeddah Saudi Arabia, the team of Engr. Mark Harold Ramirez battled it out in 4 games against the team of Engr. Julius Cañeca and Engr. Lois Darren. After the game, Engr. Jose Melvin Santos prepared snacks for everyone to congratulate them in their active participation in our activities.

"Work hard, play hard", having a good work-life balance and prioritizing both professional growth and personal enjoyment – from this more sport activities are lined-up for this year.

PSME-WRSA JC
PHILIPPINE SOCIETY OF MECHANICAL ENGINEERS
WESTERN REGION SAUDI ARABIA JEDDAH CHAPTER
Chartered 1995
"MOST OUTSTANDING CHAPTER YEARS 2005, 2006, 2007, 2011, 2012 AND 2013"

"Mechanical Engineers: Stand United as Pillars for Economic Transformation Towards Nation's Progress"

LET'S PLAY BALL!!!

BASKETBALL FUN GAME

Venue : Fawas Basketball Gym
Prince Abdulmajeed District

Date : March 17, 2023

Time : 1:00PM-3:00PM

For Location:

Contact:
Engr. Mark Harold Ramirez (0506521629)
Engr. Niño Jose Lopez (0532044768)
Engr. Jomel Santos (0551220956)

Scan Me.

[https:// www.psme-wrsa.com](https://www.psme-wrsa.com)



PSME

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Special Professional Licensure Examinations (SPLE) 2023



By:
Engr. Julius M. Cañeca

As part of the preparation for the coming SPLE in Jeddah, our organization conducted Hybrid Format Review Sessions for our aspirants with our chapter President Engr. Jose Melvin Santos, our Executive VP Engr. John Ray Madla, and yours truly. We were assisted by PP Engr. Aldrin Alizon Lango for the live broadcast and recordings. We had also special lectures for RMP conducted by Engr. Napoleon Castañeda. These were held in PSME-WRSA-JC HQ in Faisaleyah every Friday and Saturday. The activities were held at 0900H to 1300H on Fridays and 1900H to 2100H on Saturdays. Aside from the lectures, we also provided modules and other review materials for RMEE and RMP. These activities were being recorded and later being sent to the members just in case they missed the review session.

Delegate's arrival on April 17 marked the start of the much-awaited SPLE 2023 for all OFWs not only in the Middle East but in other neighboring countries. Assisted by the Philippine Professional Organization (PPO) officers, the Philippine Consulate General in Jeddah K.S.A. welcomed the arrival of PRC officials. The last time they came was for SPLE 2019. This was very significant for all of us not only that the SPLE returned but this indicated that we have surpassed the world health concerns.



The delegates' interaction with the PPO was very minimal as they were to follow protocols to preserve the integrity of the examination

and to avoid any misinterpretation by both examiners and the organization. It was a day before the verification of the application was scheduled as per the calendar of activity by the board of examiners.

Verification of all applications for the SPLE 2023 started on April 18 with the assistance of PPO-WRSA officers and all different professional organization officers in Jeddah Kingdom of Saudi Arabia. The usual procedure when taking the professional licensure examination is to have the Notice of Admission. Issuance of the NOA was well organized and the turnouts were satisfactory.



The 3-day verification accommodated all applications not only in Jeddah but also the nearest towns and cities like Yanbu and Rabigh. This showed camaraderie among OFWs with one goal in mind, to serve our fellow Kababayans. These tiring events showed how dedicated the officers of all organizations despite having their own jobs in the kingdom. This was really a selfless act to serve others.



During 1st Day Examination on April 22, everybody was advised to come early to the examination site, in Durat Al Sharq Int'l School (DASIS) for the final briefing before exam. The proctor explained the rules and regulations and introduced the examiners and the proctors. I saw the excitement and the mixed

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Managing Editor:

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Sherwin D. Francisco

John Ray O. Madla

Contributors:

Mark Harold Ramirez

Julius M. Cañeca

Niño Jose A. Lopez



Cont. (Special Professional Licensure Examinations...)

emotions among the examinees. Everything was already arranged from the rooms, the packed lunch and the materials to be used in the exams, as well as the sitting arrangements and the questionnaires. There were 15 examinees for RMP, 5 examinees for RMEE, and 1 for CPM under the PSME-WRSA JC on which all were present in the examination site. The exams were divided into 2 days for RMEE and RMP and 1 day for CPM (8 hours/day).

After more than a month of waiting, the results of the examinations were finally released with: 9 successful registered Master Plumbers with one Topped at #7, Engr. Leonard Meriales; and 2 successful registered Mechanical Engineers. Another Milestone for all of us in PSME-WRSA Jeddah Chapter.

This kind of event is one of the reason why professional organization is being formed. We will continue serving our fellow professionals as long as there are those individuals willing to share their time and efforts for the benefit of our members, associates, and others that are willing to be part of our organization. For this, we should give applause to our executive officers led by our president Engr. Jose Melvin Santos and the board of directors for the successful SPLE 2023.

SPLE-2023 PASSERS

PSME WRSA		
1	CAMPO, MELCHOR B.	RMP
2	CANECA, JULIUS M.	RMP
3	EUCAPOR, FRANCIS A.	RMP
4	MADLA, JOHN RAY O.	RMP
5	MERIALES, LEONARD P.	RMP
6	MORIONES, ORLAN C.	RMP
7	PAGLINAWAN, MARLOU P.	RMP
8	SANTOS, JOSE MELVIN D.	RMP
9	SOTTO, FELBERTSON B.	RMP
PSME WRSA		
1	ALINGOD, WILFREDO G.	RMEE
2	PILIEN, LOUIE A.	RMEE

The Road to Success



By:
Engr. Leonard P. Meriales

The examination day

It was April 22 and 23, two days of mind squeezing event, where all professionals gathered together to take the board exams of their respective careers. Mine was Master Plumber board exams.

The Master Plumber's board exam was a 2-day brain draining event with 2 subjects per day. The first day was plumbing arithmetic and sanitation design while the second day was plumbing code and practical problem. Below is a brief description of each subject:

- Plumbing arithmetic was the toughest exam among those four subjects, due to time limitation, 100 questions of mostly problem solving were to be answered in 2 hours only. Imagine, it required you 1.2 mins per question.
- Plumbing code was a 2 hours, 100 questions exam. Questions are based on the national plumbing code of the Philippines. Mainly, to pass this subject, the code must be read in order to answer those question. The basic principle of plumbing and master plumber code of ethics is included in the code and part of the questions.
- Sanitation design subject was a combination of national plumbing code and the basics of hydrology or the water cycle system

- Practical Problem subject was on the technical aspect, the actual experience and/or knowledge of the examinee with regards to plumbing system, like kinds of pipe fittings, pipes, plumbing symbols, plumbing tools, and other things related to personal experience.

My Road to become Topnotcher.

First, a heavy breakfast and a solemn prayer to start my examination day. Second, a personal strategy and mind setting on how I will take the board exam with the allotted time, plus I brought a box of chocolates, as energy booster.

I started the master plumber board exam by answering first those questions which I am confidently aware of the answers. This was important to me so I may know how many I need to work out in order to pass and focus with the time left. This strategy gave me also more time to work out with the remaining questions. In the end, in most crucial time, guts prevailed.

The result came after one month. It was May 25 when my family told me that I passed the board exam. Not just passed but landed as TOP 7. Feeling joyful, I am not sure if there's something in the chocolates or just my strategy worked out! In any case, this achievement was euphoric.

Thanks to God for this accomplishment

Well Done

As a non-profit professional organization overseas, voluntary services were rendered by the officers and members. And with their participations, planned activities were executed.

For the past few months, lots of undertakings were done in the PSME WRSA JC. We had our 1st Technical Seminar, sport activities, and monthly meetings. While planning for the “Mid-Year Convention and GMM” is on-going.

Being a BOD is not a piece of cake, we have our own task as well. Aside from our regular duties at work that sometimes extend at home. Family time also needs our attention, as time with the family builds stronger bonds between the OFW and his/her family. As they said, “family is everything”.

With limited time, BOD's still managed to execute their duties and responsibilities towards the organization. Willing to sacrifice their time for the welfare of others. Every Friday, reviews were conducted before the scheduled SPLE. And with the leadership of President Jomel Santos, PSME WRSA JC was able to produce 8 out of 11 successful examinees passing the Registered Master Plumber and one of them landed top 7 overall. Further, we also



EDITOR'S CORNER

By:
Engr. Gilbert V. Espiritu

have two Registered Mechanical Engineers in the recent 2023 SPLE Exam.

After the success of SPLE 2023 exam, notably more queries were received by PSME WRSA JC on when they will start the next review.

To the PSME WRSA JC, “Congratulations” and keep up the Momentum!



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Desiccant: Importance and Applications



Technical Article

By:
Engr. John Ray O. Madla

A desiccant is a substance or chemical that absorbs or attracts moisture from the air, causing a state of dryness (desiccation) in its vicinity. This chemical used to attract and remove moisture from air or gas and keep the products dry which, in turn, inhibits the corrosion process.

These chemicals are used in product containers during shipping to protect against

moisture damage. Desiccants also prevent condensation of moisture between window panes. Desiccants are available in various forms and are widely used in many industries, such as:

- Packing
- Electronics
- Manufacturing

Desiccants are chemical substances used as drying agents with a high attraction or affinity for water. They are usually chemically inert and do not react with water or the substances they protect. They use an adsorption

Cont. (Desiccant: Importance...)

mechanism to capture moisture and stow it away where it cannot interact with the product. Industrially, desiccants are widely used in gas streams to control water levels.

Silica is the most common desiccant. It is an inert, nontoxic, water-insoluble white solid. Other desiccants include:

- Activated charcoal
- Calcium sulfate
- Calcium chloride
- Molecular sieves (typically zeolites)



Food and Medicine Applications

Moisture can significantly affect food quality and medicines' safety by giving rise to bacteria and fungi growth. The removal of humidity and moisture is necessary to enhance a product's shelf life and ensure its safety.

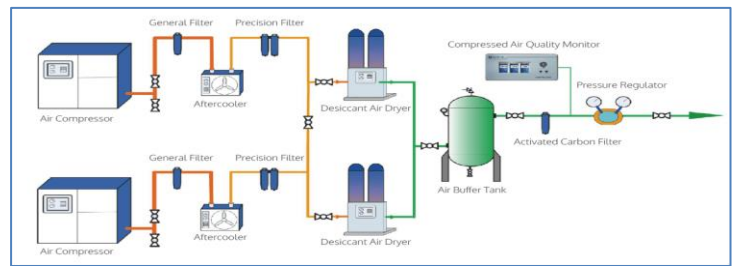
The primary purpose of desiccants is moisture absorption from the closed environment they're in. Although commonly found in food and medicine packaging, desiccants have spread to clothing, cosmetics, electronics, and various other industries, offering benefits to various products.

Pharmaceutical companies commonly use desiccants like activated carbon, silica gel, clay and molecular sieves. They're an economical and convenient way to remove moisture in a product, prolonging their life till their expiration date. Moreover, due to their non-corrosive and non-toxic nature, they're safe to put into food and medicine products.

Within the pharmaceutical world, purity, control, and cleanliness are vital aspects of packaging. The need for products like desiccants is essential due to the high levels of humidity and moisture found in any household; whether in medicine cabinets, drawers, or shelves, moisture gathers within no time. Therefore, it's necessary to use desiccants to remove this moisture from the medication to ensure their effectiveness.

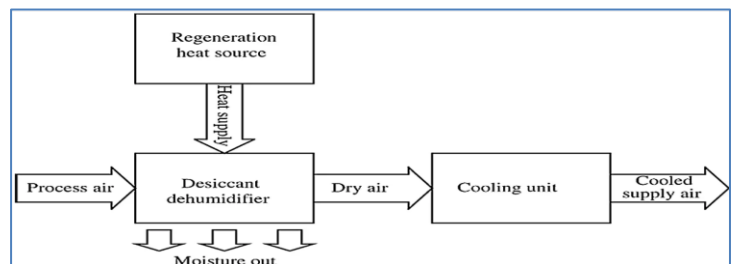
Medical Gas

In a desiccant dryer, compressed air passes through a pressure vessel with two "towers" filled with media such as activated alumina, silica gel, molecular sieve, and other desiccant material. This desiccant material attracts water from the compressed air via adsorption. As the water clings to the desiccant, the desiccant "bead" becomes saturated.



Air Conditioning

The main principle of desiccant cooling is to dehumidify the incoming outside air by directing it through a desiccant material and then removing the moisture to dry the air to the desired room temperature. In order to keep the system functioning continually, the absorbed water vapor should be taken out of the desiccant material so that it will be dried and able to absorb moisture in the next cycle. This is called regeneration process which consist to heat up the desiccant material to a certain temperature. Therefore, a desiccant cooling system (DCS) consists of three main components, the regeneration heat source, the dehumidifier (desiccant material), and the cooling unit as represented in figure below.



Advantages and Disadvantages

In Food and Medicine

The major benefit of desiccant packs is that they are perfect for protecting products from moisture. They can absorb humidity, moisture, odors, and chemicals to really protect your products. Moisture can cause significant damage to products, particularly expensive products like electronics and semiconductors.

In Air Conditioning

Some of the advantages of using a desiccant system are continuous drying even at night or cloudy days, increasing drying rate, consistent drying, improving the quality of the product, particularly for the product that is sensitive to heat, low energy usage, and improving air quality. Meanwhile, some of the drawbacks of using a desiccant system are: a low capacity for moisture absorption; pressure drop in solid desiccant; and liquid desiccant carryover by the airstream. However, the drawbacks are not limited to these only. Few other notable points are; regeneration of the desiccant material when it is saturated, regeneration process for desiccant material, the high initial cost to set up the system, and liquid desiccant could be corrosive and damage the system or components.

My PME Journey - 1st Oral Examination



By:
Engr. Niño Jose A. Lopez

Finally, after 4 years in waiting, my PME 1st Oral Examination was held at the MWO (Migrant Workers Office) in Dubai last Apr. 20, 2023. Joining me is my fellow aspirant, our former EVP Engr. Roseller A. Junsay, Jr.

All members of the Board of Mechanical Engineering (BME) were present namely, Hon. Chairman Leandro A. Conti, Hon. Lorenzo P. Larion and Hon. Jerico T. Borja, with the BME Secretariat, Ms. Josie. It was supposed to be a panel interview. But because of the changes in the venue brought about by the SPLE preparations, it was decided to be individual interview.

I was assigned to Hon. Larion. I started the presentation by introducing myself, and enumerating my qualifications and work experiences which were aligned with the Table of Specification Rating System.

With regards to my Proposed Technical Engineering Reports, Hon. Larion expressed interest on my first proposal, he recommended to add the following: operations and maintenance; all the cost involved in the project including the operating and maintenance cost; return of investment; and engineering analysis. Furthermore, all the

contents should be in accordance with RA 8495 (The Mechanical Engineering Law). Due date for submission of report is 60 days from the 1st oral exam, in that case it will be on June 23, 2023 (as of this writing I requested an extension of the due date which was granted for 30 days).

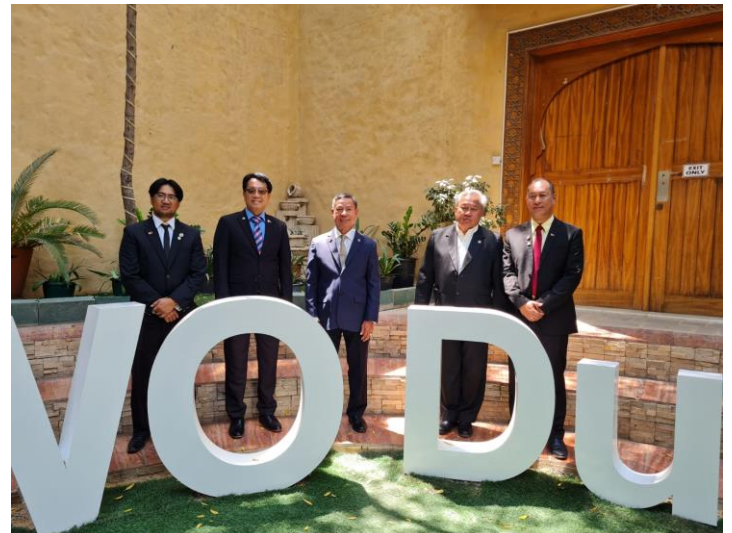
The 1st Oral Examination was truly an experience, meet up with our Honorable BMEs, our ME Brothers in UAE and Riyadh and explored the beautiful city of Dubai even in a short span of time.

My advice to my fellow ME's, level up your career, be a PME and serve our country.

Onwards to my Engineering Report and the 2nd Oral Examination!

Mabuhay ang PSME- WRSA Jeddah Chapter!

PSME Forever!



ANNOUNCEMENTS!!!



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**2023 MID-YEAR CONVENTION
AND GENERAL MEMBERSHIP MEETING**

KEYNOTE SPEAKER
ENGR. SIEGFRIED G. SIA, PME
PSME NATIONAL SECRETARY

INSPIRATIONAL SPEAKER
ENGR. SHAYED M. MAMAYOG, PME
PSME NATIONAL - VPME

"DESIGN OF AIR SEAL RING in the STUFFING BOX" by
ENGR. JOHN JOHN SOLAM

"5S TEAM TRAINING" by
ENGR. GREG GULMATICO

WITH APPROVED
3 CPD UNITS

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FRIDAY
JULY 21, 2023
8:30AM - 5:00PM
JW Marriott HOTEL

FOR INQUIRIES PLEASE CALL:
ENGR. JOSE HELVIN D. SANTOS - 0551220956
ENGR. ORLAN C. MORIONES - 0539050686
ENGR. JOBERT DELA ROSA - 0544592381

MECHANICAL ENGINEERS: STAND UNITED AS PILLARS FOR ECONOMIC TRANSFORMATION TOWARDS NATION'S PROGRESS



We, the Mechanical Engineers of the Philippines, conscious of our responsibilities to God, our country and fellowmen. Affirming our adherence to the Code of Ethics for Mechanical Engineers. Desirous in participating and contributing in the social, economic, and industrial growth of our country. Determined to support one organization that shall embrace the Mechanical Engineering profession. Have resolve to unite to accomplish these aims by constituting a national organization of Mechanical Engineers