



CHEMISTRY

INTERNSHIP INFOGRAPHICS

SSCA : Bachelor of Science (Chemistry)

SSCC : Bachelor of Science (Industrial Chemistry)

2021





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Johor

MALAYSIA

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Preface

After our first ever success in publishing Chemistry Internship Infographics for the last four consecutive years (2017, 2018, 2019 & 2020), this year, we are once again carrying on this soon-to-be tradition. Why are we doing this? Well, in today's working world, there is a mismatch between the demand and supply of graduates, with employers reporting that graduates lack the requisite knowledge, skills and attitudes. As we enter the 4th Industrial Revolution, it gets tougher and tougher to resolve this mismatch as technological disruptions are constantly reshaping job markets and altering the types of careers. In line with that, UTM is preparing the students to navigate this uncertain future, which not only requires instilling them with transferrable skills and sound ethical foundations, but also the resilience and enterprising spirit to forge new opportunities for themselves and the others.

For ease of reference, this is the compilation of the Infographics prepared by the final year students of SSCA and SSCC, whom recently just completed their Industrial & Research Training during the short semester of 2021.

Foreword by the Director, Dept. of Chemistry



CONGRATULATIONS to all 3rd year students who had successfully underwent the industrial/research training for 12 weeks during last short semester break. Hopefully all of you had able to enhance your knowledge and technical skills that you had learned in university and also had gained valuable work experience. Industrial training is where you have the opportunity to practice your communication and teamwork skills besides to practice good qualities of integrity, responsibility and self-confidence in real working environment. The work experience are surely different from one student to the other but surely there are lots of lesson learned during the 10 weeks period. **Keep on improving yourselves and never give up. Hold to the positive thought and attitudes!!! Always ask what and how I can contribute. May you all be successful in your study and self-development.**

Assoc. Prof. ChM. Dr. Norazah Basar

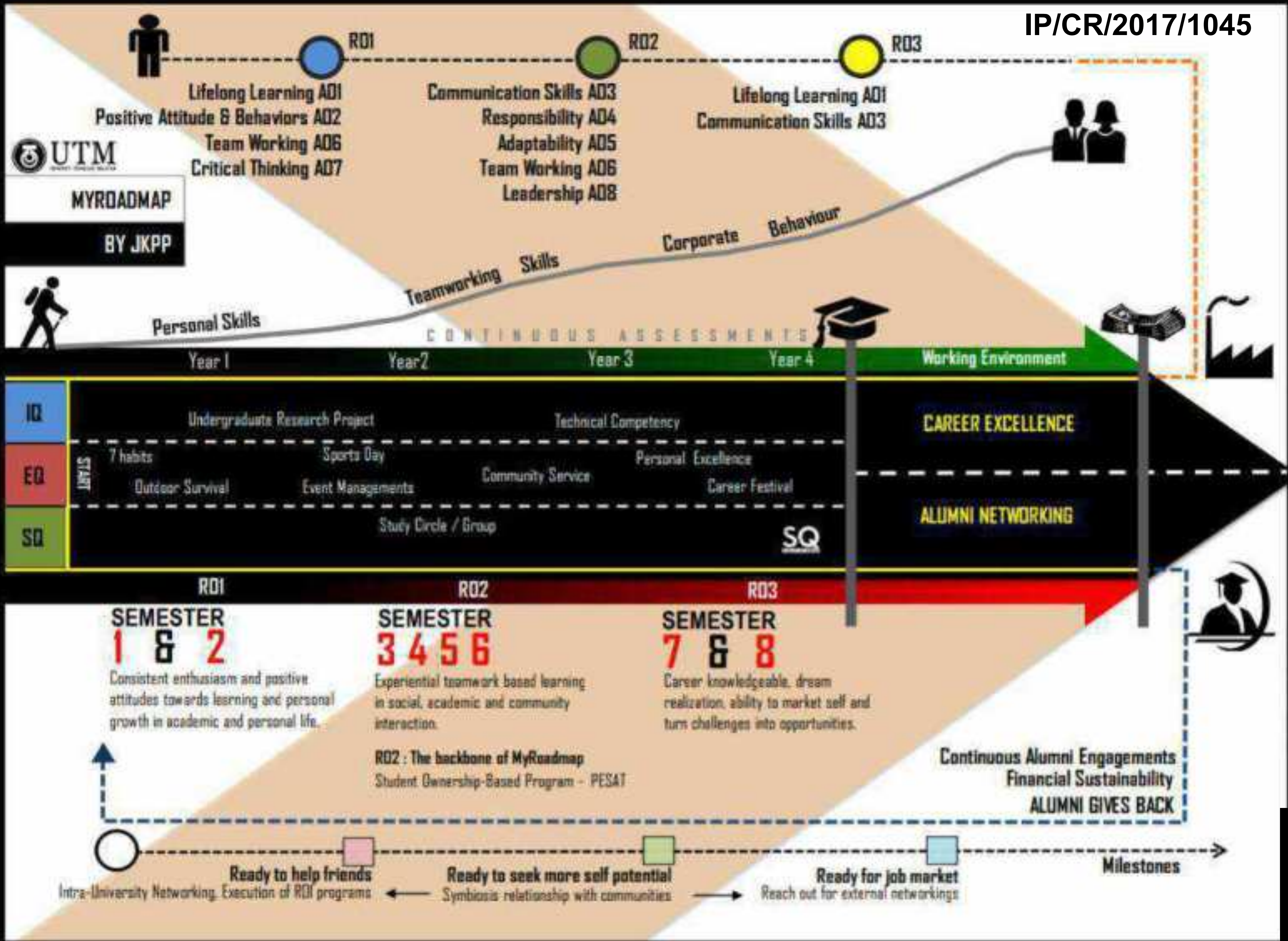
Director, Department of Chemistry

JKPP

We wish to produce graduates with relevant disciplinary knowledge and skills, ethics and morals, as well as the appropriate behaviours, mind sets, cultural and civilizational literacy, to advance them to a higher level of personal well-being. Our chemistry graduates will be ready and willing to contribute to the betterment of the family, society, nation, and global community. Such holistic, entrepreneurial, and balanced graduates are a natural extension of achieving the goal of the Malaysian basic education system, which is to ultimately develop values-driven Malaysians.



**Jawatankuasa Pembangunan Pelajar (JKPP)
invites all SSCA & SSCC students to join MY ROADMAP®**



MYROADMAP

BY JKPP

Lifelong Learning AD1
Positive Attitude & Behaviors AD2
Team Working AD6
Critical Thinking AD7

Communication Skills AD3
Responsibility AD4
Adaptability AD5
Team Working AD6
Leadership AD8

Lifelong Learning AD1
Communication Skills AD3

Personal Skills

Teamworking Skills

Corporate Behaviour

CONTINUOUS ASSESSMENTS

Year 1

Year 2

Year 3

Year 4

Working Environment

IQ

Undergraduate Research Project

Technical Competency

CAREER EXCELLENCE

EQ

START

7 habits

Sports Day

Personal Excellence

Outdoor Survival

Event Managements

Community Service

Career Festival

ALUMNI NETWORKING

SQ

Study Circle / Group

SQ

RO1

RO2

RO3

SEMESTER
1 & 2

SEMESTER
3 4 5 6

SEMESTER
7 & 8

Consistent enthusiasm and positive attitudes towards learning and personal growth in academic and personal life.

Experiential teamwork based learning in social, academic and community interaction.

Career knowledgeable, dream realization, ability to market self and turn challenges into opportunities.

RO2 : The backbone of MyRoadmap
Student Ownership-Based Program - PESAT

Continuous Alumni Engagements
Financial Sustainability
ALUMNI GIVES BACK



Ready to help friends

Ready to seek more self potential

Ready for job market

Milestones

Intra-University Networking, Execution of RO1 programs

Symbiosis relationship with communities

Reach out for external networkings

Without #myROADMAP, you can still be a graduate,
But with #myROADMAP, you will definitely be an
excellent graduate:
Your graduation will be a celebration for employers
and community.



ARTICLES

The Do's and Don'ts in Resume Writing

Sheela Chandren and Norazah Basar

Internship at Government Agencies

Mohamad Shazwan Shah Jamil, Nursyafreena Attan and Che Rozid Mamat

Sharing Internship Experience

Mohamad Hamdi Zainal Abidin and Juan Matmin

The Do's and Don'ts in Resume Writing

Sheela Chandren¹ and Norazah Basar¹

¹ *Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor.*

As the adage goes, “you only get one chance at a first impression”. A resume is an extension of yourself so that a prospective employer can get a general idea of their candidates. Because of that, your resume is the single determining factor of whether or not you should be granted an interview. A great resume should be effective, concise and clearly written, with the ability to pique the recruiter’s interest enough that they want to call you for a meeting.

Realising how critical resume writing can be, Ms. Zarina Othman, the HR Manager of UPM Raflatac Sdn Bhd, generously offered to share valuable insights regarding the subject matter on the 20th of June 2021. The participants were students who were slated to undergo their Industrial Training. During the online session, Ms. Zarina also shared a handful of helpful tips in preparing a good internship resume based on her 16 years of experience in human resources.

Be Accurate and Concise

Ms. Zarina highlighted that when writing resumes, students should take extra care of their objectives, compile all the necessary personal information, and always start with their name and contact details. Any previous employment details or part-time jobs held should also be included to add working credibility to the candidate. Apart from that, details on extra co-curricular activities and education details are also essential. It is always recommended to be honest and not put anything not part of your skills set.

The Do's and Don'ts in Resume Writing

Sheela Chandren¹ and Norazah Basar¹

¹ *Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor.*

Read and Understand the Job Description

If students are sending their resumes to multiple prospective employers, avoid sending a generic resume for all of them. Have a closer look at what the job entails and its specific requirements. For instance, some jobs require them to work in a team, so choose instead to highlight their social skills in the resume for that particular application. This will ensure that the resume is seen as being in line with what the recruiters are looking for. It would also help to research the value, mission, and vision of the organisation to better tailor the resume.

The Usage of Action Words

More often than not, recruiters would skim through the high volume of resumes, especially during peak hiring seasons. Using action words in a resume helps set a candidate apart from the others. Some examples of action words include designs, advises, establishes, resolves and many others. These words help furnish the resume at the same time showcasing one's leadership capabilities. That being said, do ensure that these terms are accurately used in the resume.

The Do's and Don'ts in Resume Writing

Sheela Chandren¹ and Norazah Basar¹

¹ Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor.

Words to Avoid

As words can make or break a resume, one of the most common pitfalls of resume-writing is poor word choice. Some examples of words to avoid include:

Tries – some employers see this as a lack of confidence. In the job market, employers expect people to do, not try.

References available upon request – some recruiters see this as extra work for them. It implies that they have to contact and wait for the candidate reply to get a hold of the reference list. References should be provided in the resume in the first place

Overused words – *Hard worker, think outside the box, team player and many others*: these words are often overused and do not help in setting a candidate apart from all the other candidates. In a competitive job market, it is always advantageous to stand out. Instead of using these words, prove them throughout the resume.

Proofreading

Last but not least, do not underestimate the impression left from a single typographical error. Take the time to read through the resume thoroughly down to every last detail. Any spelling error on the resume sends the message that the candidate does not have the eye for small details. If the student is not confident in a particular language, do not hesitate to get a second opinion. A careful, thorough read can go a long way.

Hopefully, these tips and tricks will help our students prepare good resumes and secure internship positions more easily.

Internship at Government Agencies

Mohamad Shazwan Shah Jamil¹, Nursyafreena Attan¹ and Che Rozid Mamat¹

¹ *Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor.*

Now you have your resume/CV ready, so what's next?

Choosing the internship place!!!

There are thousands of places that you can choose whether in Malaysia or overseas, government or private agencies, small or big companies, it's entirely up to you. There are many factors that you need to consider before choosing one, such as the location, job scope, allowance, working environment and many more.

In this article, we would like to list down some of the government agencies that you can choose as your internship place.

Internship at Government Agencies

Mohamad Shazwan Shah Jamil¹, Nursyafreena Attan¹ and Che Rozid Mamat¹

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Jabatan Kimia Malaysia



Jabatan Kimia Malaysia is a government body under the Ministry of Science, Technology and Innovation (MOSTI). It provides analysis, investigation and scientific consulting services to government agencies. The headquarter is located in Petaling Jaya, Selangor and they have branches in all states in Malaysia, except Perlis. For more information, please check their website : <https://www.kimia.gov.my/>

Internship at Government Agencies

Mohamad Shazwan Shah Jamil¹, Nursyafreena Attan¹ and Che Rozid Mamat¹

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Jabatan Alam Sekitar



Jabatan Alam Sekitar is a government agency under the Ministry of Environment and Water. This department has offices in all states and is responsible for ensuring sustainable development in the progress of the country and the environment is always clean, healthy and safe for the well-being of the people. It also acts as a disseminator of information, skills and thoughtful ideas for the development of the community's mind towards a continuous appreciation of the natural environment. If you are interested in the field of environmental chemistry, you may want to apply the placement at this department. For more information, please go to their website : <https://www.doe.gov.my/>

Internship at Government Agencies

Mohamad Shazwan Shah Jamil¹, Nursyafreena Attan¹ and Che Rozid Mamat¹

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Agensi Nuklear Malaysia



Agensi Nuklear Malaysia is a government agency under the Ministry of Science, Technology and Innovation (MOSTI) and located in Bangi, Selangor. It is responsible for research and development (R&D) in the field of nuclear science and technology in Malaysia. which continues to play an active role and contribute to the implementation and achievement of national science and technology policies. For more information, please go to their website :

<https://www.nuclearmalaysia.gov.my/>

Sharing Internship Experience

Mohamad Hamdi Zainal Abidin¹ and Juan Matmin¹

¹ *Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor.*

Internship at Pathlab



Pathology & Clinical Laboratory (M) Sdn Bhd or Pathlab is a one of Malaysia's largest servicing lab that provides a comprehensive healthcare solution to assist the community in monitoring, maintaining, and preserving one's health. Pathlab Muar internships required trainees to alternate between working at the front desk and in the lab. The duties at the front desk included greeting and registering patients as well as sorting reports. As a result, trainees' communication skills improved as they met many patients and needed to listen to their requests and provide them with the best service. On the lab side, the trainees had learned many lab skills from the industrial supervisor, Mr. Alvin, and the senior laboratory assistants.

Sharing Internship Experience

Juan Matmin¹ and Mohamad Hamdi Zainal Abidin¹

¹ *Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor.*

Internship at Pathlab

During the internship, the trainees had learned to carry out blood count test, Urine Full Examination Microscopic Examination (Urine FEME), Venereal disease research laboratory (VDRL test), Treponema pallidum hemagglutination assay (TPHA test), blood group test (ABO/Rh test), Prothrombin Time and International Normalized Ratio (PT/INR test). The trainees also developed proficiency on how to use centrifuge machine, the Sysmex haematological analyzer, and the micropipette. Because quality control is critical for maintaining or enhancing product quality, the trainees were responsible for daily quality monitoring and weekly cleaning of the haematological analyzer.

Notably, Pathlab offers outstanding industrial training opportunities. The trainees gained a wealth of valuable experience and laboratory abilities as a result of their industrial training. In addition, the trainees were also familiar with blood and urine testing, as well as the quality control of certain tests. All in all, these experiences help students improve their soft and technical skills as well as prepare them mentally, emotionally, and physically for their future careers.



Sharing Internship Experience

Juan Matmin¹ and Mohamad Hamdi Zainal Abidin¹

¹ Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor.

Internship at MPOB

Malaysia Palm Oil Board (MPOB) is responsible for promoting and developing the palm oil sector. Over the years, MPOB researchers have shared and made useful research results for the scientific community. As part of the internship, the trainee was a research project on lignocellulosic biorefinery utilizing oil palm biomass. Throughout the training, the trainee handled several instruments including pH meter, autoclave, centrifuge, thermal gravimetric analysis (TGA), scanning electron microscope (SEM) and Fourier transform infrared spectroscopy (FTIR). Aside from conducting lab experiments, trainees visited the Palm Oil Mill Technology Centre (POMTEC) at Labu in Negeri Sembilan. The 12-week internship at the MPOB provided trainees with valuable exposure to the palm oil industry.



Sharing Internship Experience

Juan Matmin¹ and Mohamad Hamdi Zainal Abidin¹

¹ Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor.

Internship at RAYMINTEX

RAYMINTEX is a pilot plant for pre-vulcanizing natural rubber latex using gamma radiation. Radiation-vulcanized natural rubber latex (RVNRL) can be produced by adding radioactive cobalt-60, which will be used for marketing, promoting, and transferring knowledge. The RVNRL can be used for any dipped product, such as examination gloves, balloons, finger cots, dental dams, etc. Typically, gamma radiation has been used to irradiate natural rubber latex, but a neoteric method utilizing ultraviolet light is being developed in the RAYMINTEX plant.

The trainees underwent laboratory training included latex formulation and quality control tests including total solid content (TSC), dry rubber content (DRC), mechanical stability time and alkalinity, as well as preparation of latex films with coagulant dipping and tensile strength properties. In addition, the trainees had the opportunity to participate in the formulation process of RVNRL production based on customer requests. For instance, with the help of Dr Sofian and other RAYMINTEX's staff, the trainees had developed latex for baby teats for the Thailand's market



INTERNSHIP INFOGRAPHICS



KEDAH

Kedah Cement Sdn Bhd (Langkawi Plant)

Student's Details

Name : Siti Zulyana Bt Azmi
Program : 3 SSCC
Matric No. : A18SC0322
Supervisor : Faculty
 - Dr. Faizuan Abdullah
 : Industry
 - Mrs. Rozana Hamdan



Address: Langkawi Plant, Teluk Ewa, Mukim Ayer Hangat,
07000 Langkawi

Contact: HR - Ms. Cherist

lay-chen.lim@ytlcement.com.my

Chemist - Mrs. Rozana Hamdan

rozana.hamdan@ytlcement.com.my

Job Scope (QC)

- Validation of procedures (updated)
- Audit - Dept of Standard Malaysia, CIDB, Internal & SIRIM
- Ensure the quality of products continuously / 2-hourly
- Instrument calibration
- Run testing (physical, wet, proximate)

Introduction

- In 2019, Kedah Cement Sdn Bhd is acquired by YTL, a leading regional building materials group in Asia
- KCSB is a cement plant producing 2 million tons of clinker per yr and 283000 tons of cement per yr

Attributes/Skills

Humble	Stress Management
Interpersonal Skills	Teamwork
Scholarship	Adaptability



XRF Analyser



Blaine Apparatus



XRD Analyser



Bomb Calorimeter



Vicat Apparatus

DEPARTMENT OF CHEMISTRY MALAYSIA (KEDAH)

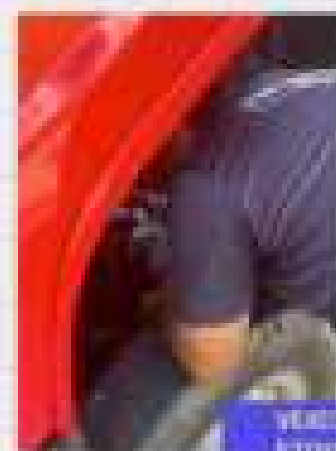
Kimia Malaysia Kedah, Jalan Suka Menanti, 05150, Alor Setar, Kedah



ACCIDENT
CASE

Function Department Of Chemistry Malaysia

Provide analysis services, investigation and scientific consultation with government agencies such as Ministry of Health of Malaysia, Royal Malaysia Police, Road Transport Department Malaysia, Department of Environment and Royal Malaysian Custom Department.



VEHICLE
EVIDENCE



HPLC



GCMS

Job Scope:

- Run an analysis of seized pharmaceutical products and traditional medicines for the presence of scheduled poisons under the Poisons Act 1952 by using Gas Chromatography Mass Spectrometry (GCMS) & High Performance Liquid Chromatography (HPLC).
- Handle documentation & description, sampling & extraction of exhibits & sample.
- Examination and restoration of serial numbers neither for chassis number or engine number.
- Traffic Accident Investigation

Supervisor

Cik Nawaltul Akma Binti Ahmad Sabri (Industry)
Ts.Om. Dr Faizuan Bin Abdullah (Faculty)

RESEARCH TRAINING JABATAN KIMIA MALAYSIA (KEDAH)

PREPARED BY: ROS FATEEN NATASYA BINTI ROSLI
FACULTY SUPERVISOR: TS. CHM. DR FAIZUAN BIN ABDULLAH
COMPANY SUPERVISOR: CIK NAWALTUL AKMA BINTI AHMAD SABRI

FUNCTION OF JABATAN KIMIA MALAYSIA

- The Department of Chemistry operates a nationwide laboratory network that provides scientific analysis, inquiry, and advice to government entities.
- To assist law enforcement in the implementation of programmes connected to water safety, food, the environment, and industrial products in order to safeguard and improve public health and safety, as well as consumer interests and occupational health and safety.
- Provide scientific analysis services to government entities such as Polis Diraja Malaysia (PDRM), Kementerian Kesihatan Malaysia (KKM), Jabatan Pengangkutan Jalan (JPJ), Jabatan Kastam Diraja Malaysia (JKDM), and others.

JOB SCOPE

- Identify schedule drug/poison as listed in the Poisons Act 1952.
- Description of exhibits, sample preparation of medicine samples, extraction of medicine samples.
- Handle instruments; Gas Chromatography Mass Spectrometry and High Performance Liquid Chromatography.
- Vehicle etching and traffic accident investigation



Gas Chromatography Mass Spectrometry



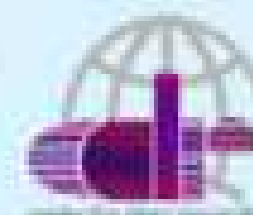
High Performance Liquid Chromatography



Etching Process



PENANG



Centre of Drug Research (CDR)

Centre for drug discovery and development, Biomedical analysis, neuroscience and epidemiology and behavioural science. They also have a computer-aided drug design and synthesis specialist at CDR

Location

Centre for Drug Research
Universiti Sains Malaysia 11800
USM Penang, Malaysia



Equipment/facilities available

- FTIR – Nicolet 6700 Thermo Scientific
- HPLC ECD (autosampler) – Antec
- HPLC DAD – Agilent 1200 Series
- HPLC UV/Vis & fluorescence detector – Jasco UV 2070 Plus, FP 2020 Plus
- HPLC UV/Vis detector – Perkin Elmer Series 200
- Soxhlet apparatus, rotary evaporator, freeze dryer, dissolution apparatus

Things learnt

- Exposed to the software in drug design
- Communicate effectively with others to solve problem
- Get to know the properties of unknown compound through the software 3DQSAR.com

Priceless Experience

- Taught me to be responsible on the task given
- Train to be a better in time management
- Exposed to work pressure and how to control it

INDUSTRIAL SUPERVISOR
PROFESSOR DR. MOHD. NIZAM MORDI
FACULTY SUPERVISOR
DR. ROHUL HAYAT BIN ADNAN

Contact of Organization
Tel: +604-658 3444/ +604-653
3888 Ext. 3272
Faks: +604-656 8669
dir_cdreusm.my

INDUSTRIAL TRAINING

MERIEUX-NUTRISCIENCE MALAYSIA SDN. BHD. PERAL PENANG.

BACKGROUND COMPANY

Merieux NutriScience Malaysia Sdn. Bhd. is dedicated to protecting consumer's health throughout the world, by delivering a wide range of test and nutrition industries. In addition, we also serve companies in the water, environment, agrochemical, consumer good, pharmaceutical and cosmetic sector.



More than 100 accredited laboratories



More than 8000 employees

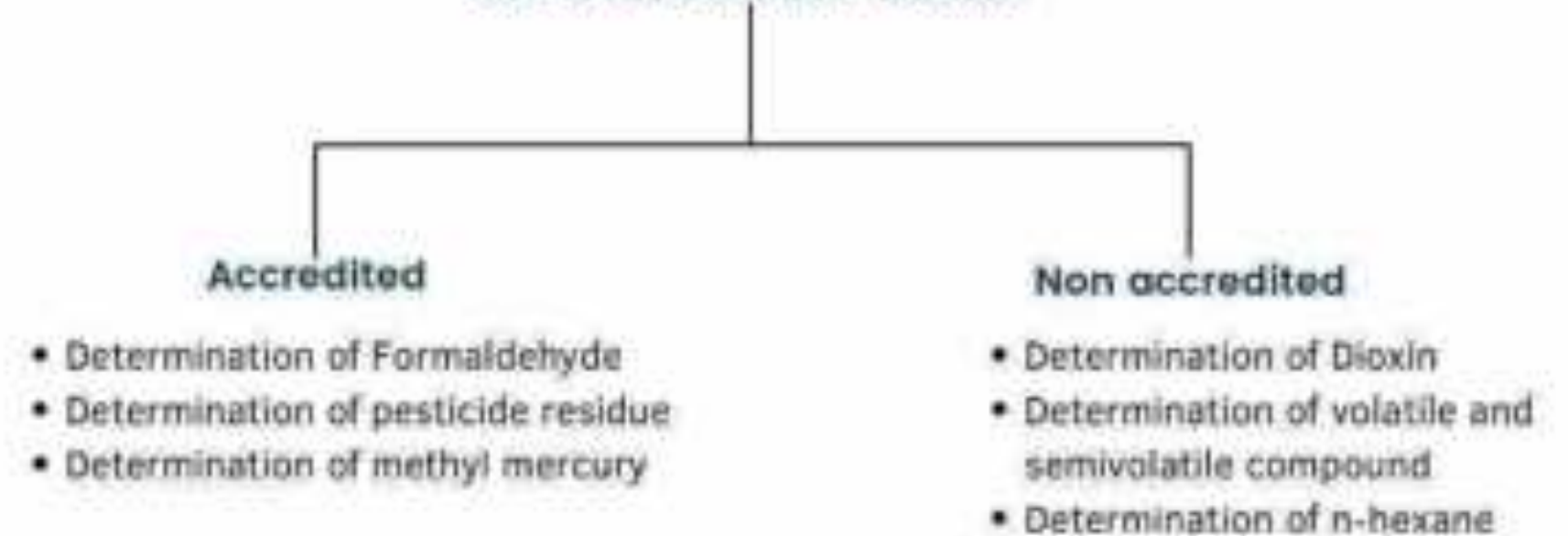


Located in 27 countries

COMPANY'S SERVICES

- Chemical testing
- Pharma and medical services
- Food safety and quality
- Water and environmental
- Agrochemical
- Consumer good
- Microbiological testing

ACTIVITIES AND TASKS



GENERAL WORKFLOW

- 

Sample tracking
- 

Preparation
- 

Operate instrument

 - GC MS
 - GC FID
 - GC ECD
- 

Data collecting, analysing and reporting



NAME : NURUL IZZATI BINTI MOHAMMAD HAIR
 MATRIC NO. : A171A0211
 PROGRAMME : J-SSCA

Supervisors
Faculty: Dr Khairil Juhanni binti Karim
Industry: Mr. Eddie Tan



SAW WEI ZHEN (3SSCC) EURO CHEMO-PHARMA

Sample Preparation

- Sieving and packaging sample
- Labeling the sample



R&D ACTIVITIES

- Do own formulation based on customer's need
- Do improvement on existing products



Effervescent Vitamin C

Vegetarian Luncheon Meal



Biscuit Cream filling

Flavored jelly



OTHERS

- Colour matching
- Chemical testing
- Quality control
- Documentation



+604-3901941

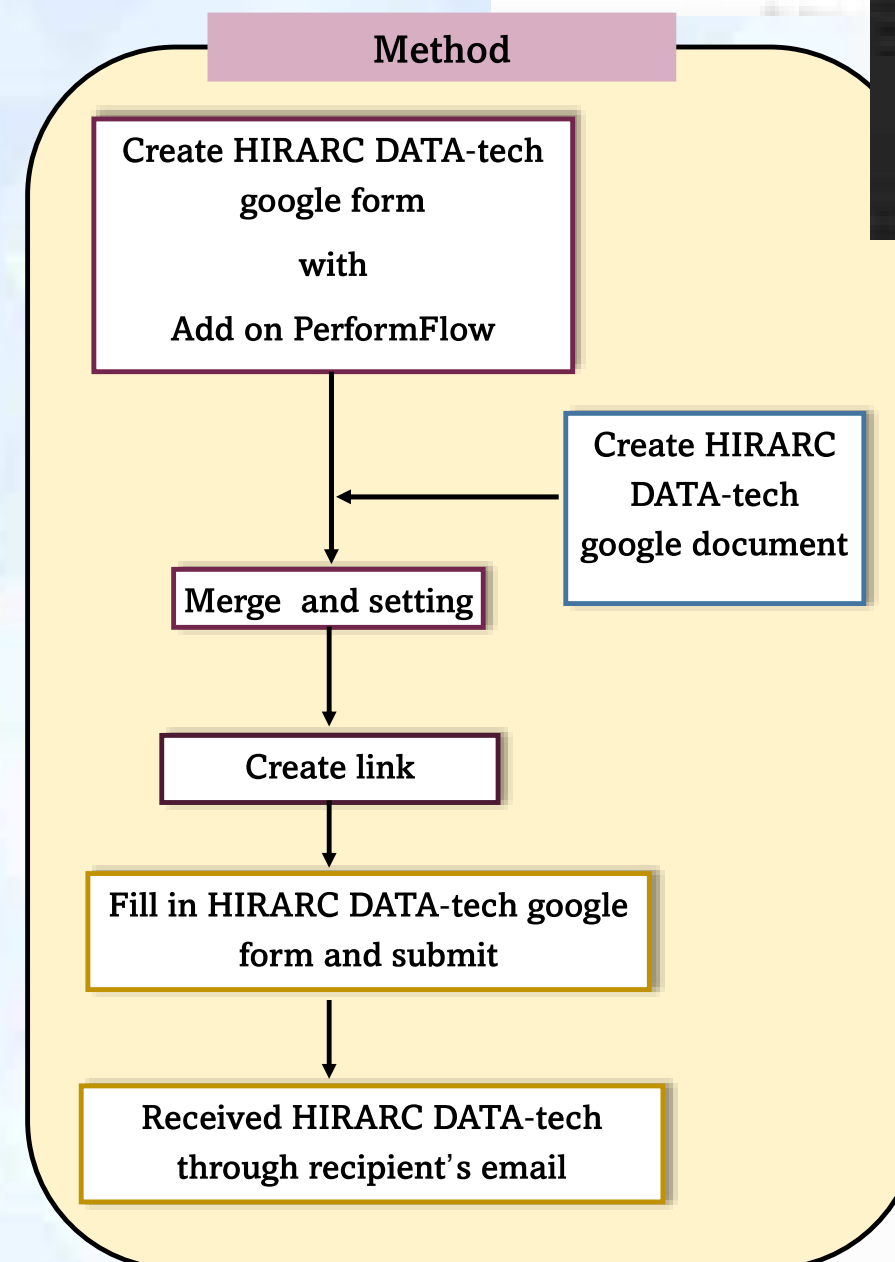
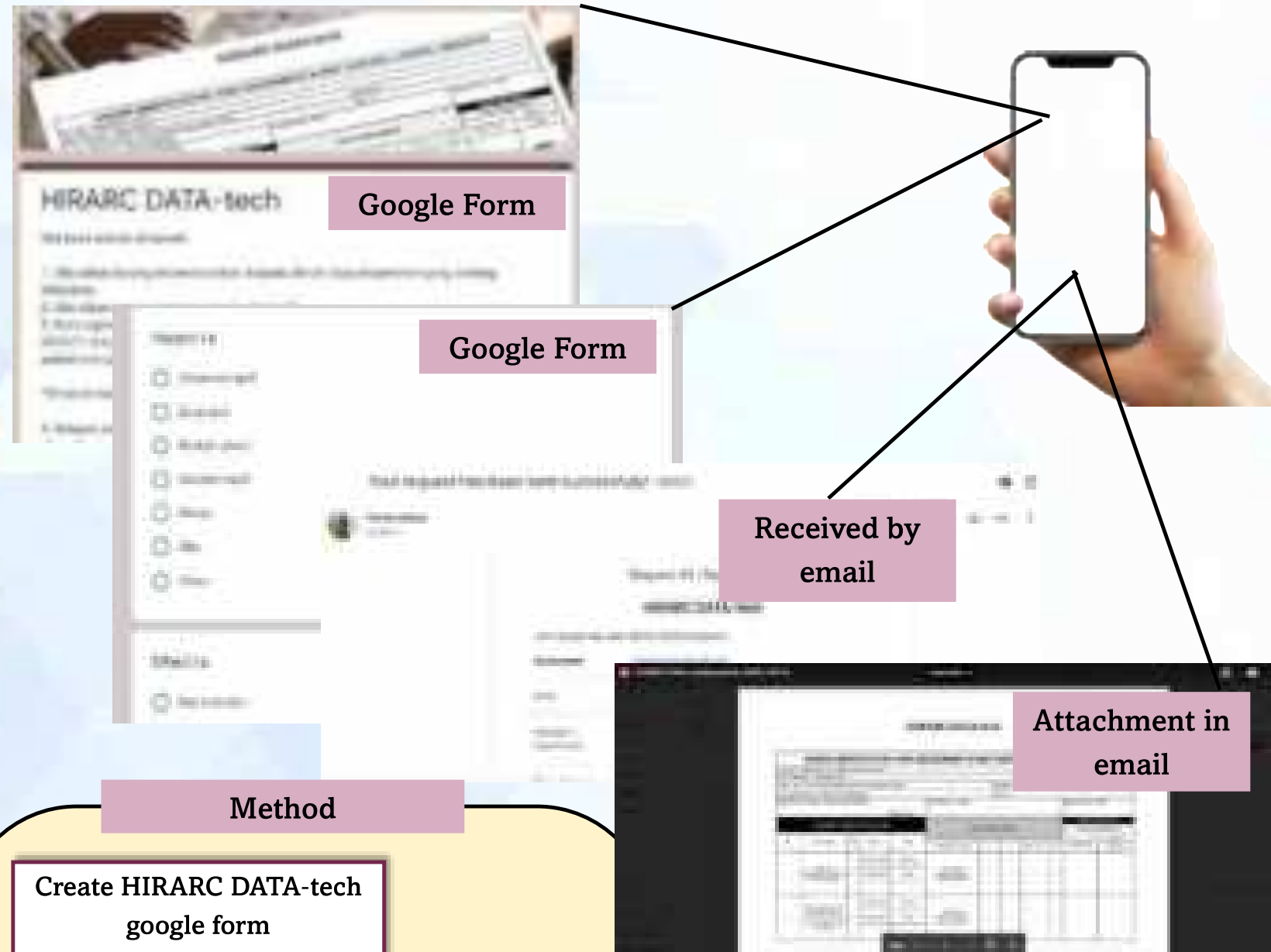
marketing@eurochemo.com



2408 & 2809, Lorong
Perusahaan Satu, Prai
Industrial Estate, 13600 Prai,
Penang, Malaysia

HIRARC DATA-tech

MARINA MOKHTAR, WAN NUR IZZAH WAN MOHAMED YUSFI, NORAIMI ABDUL WAHAB, NORAIN ISA
UNIVERSITI TEKNOLOGI MARA, CAWANGAN PULAU PINANG



ABSTRACT

Hazards Identification Risk Assessment and Risk Control (HIRARC) is a process to determine a hazard according to work activity, with the intention to eliminate the risk of accidents before performing the risk control. It is to ensure that the hazard exposure can be reduced on each work activity. All organizations that have carried out risk assessments at the workplace need to prepare HIRARC form for legislation purposes. It should be handled systematically and recorded so that the results are reliable with a complete analysis.

Unfortunately, many liaison officers and students at academic laboratories in universities fail to fill in the HIRARC form due to the lack of awareness, little knowledge, and low self-confidence.

Therefore, HIRARC DATA-tech was established to help them to fill the form easily in no time. HIRARC DATA-tech is a simple application using PerformFlow that can easily create HIRARC form, and it is available for printing.

Results showed that more than 90 % of the users are satisfied with HIRARC DATA-tech. This simple application is not only helping them to fill in the information correctly and accurately, but it also helps the university to comply with the rules set by Occupational Health and Safety Committee under the Occupational Safety and Health Act 1994 (Act 514).

MYCO2 SDN BHD

- 16, Lengkok Kilik 1, Taman Industri Awam,
13000, Pulau, Penang, Malaysia.
- 04-3806282
- enquiry@myco2.com.my
- www.myco2.com.my



Facility Supervisor : Dr. Akmal Bin Mustofa
Industrial Supervisor : Mr. Doo Kah Wa



Introduction of Company

MyCO2 Sdn. Bhd is a home-grown and award-winning independent laboratory established in 2006. It is a modern laboratory facilities are capable of performing chemical, microbiology, nuclear acid and physical analyses for petrochemical, industrial, consumer and pharmaceutical products.



Oil & Grease Test

Suspended solid test

Job Scope

- Oil & Grease Test
- Suspended Solid Test
- Ammoniacal Nitrogen Test
- Phospor Test
- COD Test
- Total Dissolved Solid Test
- Total Water Hardness Test



UV-VIS Spectrophotometer

Instruments

- UV-VIS Spectrophotometer
- pH Meter
- TDS meter
- Turbidity meter

Lesson Learnt

- Hands-on practice on handling instruments with the correct ways
- acquire soft skills, working ethics, confidence and ability to work in team and independently



PERAK



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



INDUSTRIAL TRAINING

Department of Environment

Negeri Perak

FUNCTION

The main function is to prevent, eliminate, control the pollution and preserve the environment in accordance with EQA 1974 and acts related under it.

VISION

Environmental conservation for the well-being of the people

MISSION

To ensure sustainable development in the process of nation building

TRAINING EXPERIENCE

- 1) River water sampling
- 2) Groundwater sampling
- 3) Creating posters, video and banner
- 4) EIA meeting, filing
- 5) Practical on smoke analyzer (Petrol & Diesel)
- 6) Lower pH at auto station investigation
- 7) Organizing webinar program
- 8) Joined webinar talk
- 9) pH calibration learning session

NURUL AMIRAH BINTI HARUN
A18SC0261
SUPERVISOR:
CHM. DR. MOHAMAD
SHAZWAN SHAH BIN JAMIL
(FACULTY)
EN. AZHAR BIN ZAINAL
ABIDIN
(INDUSTRY)





LEMBAGA AIR PERAK INTERNSHIP INFOGRAPHIC



PERSONAL DETAILS

Name: Muhammad Haziq Bin Shahril
Matric No : A18SC0137
SV Faculty : Dr. Siti Aminah
SV Company : Mr. Norzaimi Bin Harun (Assistant Science Officer)

COMPANY BACKGROUND

- Lembaga Air Perak (LAP) was established according to the Law of Perak under state 1988 Enactment 12 and starts to operate on January 1990
- LAP is responsible to construct, manage and conduct water installation in Perak which cover 10 districts that are divided into 5 provinces



HEADQUARTERS OPERATION DEPARTMENT- LABORATORY UNIT

Flow to Handle Sample

- Registration
- Analytical Quality Control
- Sample Testing
- Result recorded

Water Parameter Testing

- Aluminum, nitrate, ammonia, fluoride, chloride, chlorine, iron and manganese (HACH DR 5000 Spectrophotometer)
- pH, turbidity, color, total dissolved solid (TDS), conductivity, hardness and alkalinity
- Calibration of pH and conductivity meter

Project Assigned

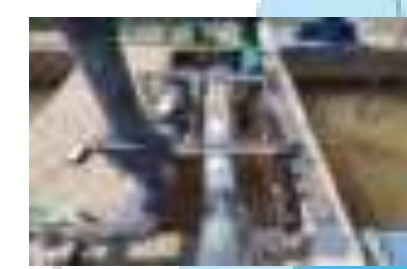
- Jar testing to determine optimum dosage of lime & alum at LRA Ulu Kinta
- Different concentration of alum and lime were dosed
- Floccs appearance were observed



WATER TREATMENT PLANT (LOJI RAWATAN AIR ULU KINTA)

Water Treatment Plant

- Water treatment process
- Chemical charging
- Backwashing process
- Chlorine drum replacement and leakage test
- Bacteria testing on treated water
- Routine water parameter testing
- Maintenance of actuator and SCADA panel
- Testing of chlorine scrubber system



RESEARCH TRAINING



KenEp Laboratories (M)
Sdn. Bhd

013-5882567

No 5 & 5A, Jalan Jelapang Bayu 1, Puncak Jelapang Bayu,
30200, Ipoh, Perak, Malaysia

labekenep.com.my

NURUL JANNAH BT ISMAIL
A18SC0274

MISSION

"Working closely with our customers to customize the design, fabrication, installation, testing and certification of your system"

ABOUT COMPANY

KenEp Laboratories (M) Sdn. Bhd is the first commercial analytical laboratory in Perak to be awarded the ISO/IEC 17025 certification in 2012. KenEp has maintains rigorous QA/QC plan to keep up the ever growing market demand for quality analytical services.

JOB SCOPES

- Assistant chemist during water testing
- Helping monitoring chemist
 - 1) Photocopy monitoring report
 - 2) Key in data monitoring report
 - 3) Arrange report according client

MINI PROJECT

- 1) **Title** : Fluoride in Water based on AQ300 Method
- 2) **Method**
Fluoride reacts with Ce^{3+} and alizarin-3-methyliminodiacetic acid in acidic solution to produce a violet colour, the absorbance of which is measured at 620 nm

SOME OF MY EXPERIENCES

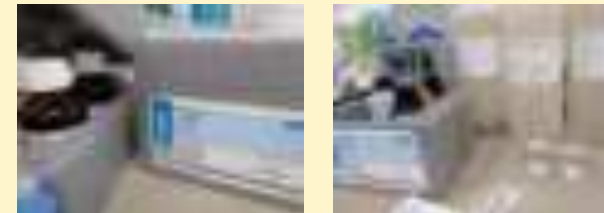
1) pH Test by pH meter



2) Total Suspended Solid(TSS)



3) Sulphide, Chloride, Cyanide Fluoride, Ammonium (Test Kit) (UV-Vis Spectrophotometer)



4) Turbidity (UV-Vis Spectrophotometer)



5) Total Dissolved Solids (TDS)



6) Documentation



- 3) **Scope** : -->This method covers the determination of in ground, potable, surface, waste, eluates and boiler water.
--> This method is equivalent to ISO/DTS 15923-2 method

- 4) **Reagent & Solution**: --> Stock Acetate Buffer Solution
--> Stock Cerium Nitrate Solution
--> Fluoride-F Stock Standard Solution (100 mg F/L)
--> Stock Chromogenic Reagent
--> Diluted Chromogenic Reagent
--> Spiked Acetate Buffer Solution
--> Diluted Cerium Nitrate Solution
--> Auto Calibration - Fluoride-F 4 mg F/L Solution
--> Fluoride-F Control Stock Standard Solution (100 mg F/L)

- 5) **Procedure**
Pour calibration standards, QC solutions and samples into sample cups and reagent wedges, according to the user-defined work list.

6) Result



AQ300 Tray Report

RESEARCH TRAINING



KENEP LABORATORIES (M)
SDN BHD.



No. 10, Jalan Kenep, 43000 Kajang, Selangor, Malaysia



Working closely with our customers to customize the design, fabrication, installation, testing and verification of your system.

ABOUT COMPANY

Kenep Laboratories (M) Sdn Bhd is the commercial arm of a laboratory in Perak. The laboratory has been established with the facilities and quality control laboratory to provide analysis of drinking water. It is specialized in ground water and water meter treatment.

JOB SCOPE

- System installed during water testing
- Testing monitoring chemical (Potassium dichromate, Iron) in also monitoring water temperature according their

MINI PROJECT

Verification of chromium using
SPHA 3000 - Cr

Objective

To verify the SPHA 3000 method is suitable for testing Chromium analysis

Reference

The method with diphenylpicrylhydrazyl is almost specific to chromium. But sometimes interference can occur with other metal ions. Interference with regards to such heavy metals as chromium at a specified pH. Pb or Hg concentrations as high as 200 mg/l is acceptable, but at concentrations exceeding 1 mg/l, can the color is yellow for the test, and not for strong

Apparatus

- Spectrophotometer (20 ml or 100 ml with a light path of 1 cm or longer)
- Test glassware
- Volumetric flask (100 ml)
- Test samples with test
- Standard Cr ion



Reagents

• Stock chromium solution 200 mg/l
Dissolve 50.0 mg K₂Cr₂O₇ in water and dilute to 250 ml, 100 ml = 200 µg/l

• Standard Chromium solution
Dilute 100 mL stock Chromium solution to 100 ml, 100 ml = 100 µg/l. Prepare calibration standards at time of analysis

• Diphenylpicrylhydrazyl solution
Dissolve 250 mg/l diphenylpicrylhydrazyl in 50 ml acetone. Store in a brown bottle. Prepare weekly. Discard if the solution has been discolored

• Sodium hydroxide, 1N
Dissolve 40 g NaOH in 1 L water. Store in plastic bottle



Student Profile

Name: Nur Hafizah Nur Hafizah
Matric Number: 20201010
Course: B.Sc.

MY EXPERIENCE



1. Get Test by customer



2. Double check SPHA Spectrophotometer



3. Test Suspended Solid (SS)



4. Sulphate, Chloride, Calcium, Fluoride, Ammonium (see test kit)



5. Total Dissolved Solids (TDS) & Conductivity



Procedure

- Preparation of calibration curve (absorbance reading)
- Prepare standard. We weighed an standard chromium solution 20 µg/l ml
- Starting from 200 to 2000 µg/l
- 100.0 ml of diphenylpicrylhydrazyl
- Test with a 100 ml, standard flask and add determination of standard 2 ml of diphenylpicrylhydrazyl solution for 10-20 minutes for color production
- Conduct a calibration curve by plotting absorbance (corrected absorption of chromium ion) against measured at 540 nm using 1 cm of absorption cell. Blank Reagent for reference.

Result



Calculation

From 50 readings, take the 8 best values.

Concentration (µg/l)	Absorbance
200	0.05
400	0.10
600	0.15
800	0.20
1000	0.25
1200	0.30
1400	0.35
1600	0.40

Mean = observed result - expected result = 0.05 - expected result

$$\text{Mean} = \frac{0.05 + 0.10 + 0.15 + 0.20 + 0.25 + 0.30 + 0.35 + 0.40}{8} = 0.25$$

The method is accepted because the error percentage is 0% which is not within the acceptance range.

RESEARCH TRAINING REPORT

KENEP LABORATORIES (M) SDN BHD
NO 5 & 5A, JALAN JELAPANG BAYU 1, PUNCAK JELAPANG BAYU,
30020, IPOH PERAK

INDUSTRY SUPERVISOR : MS MARSALIANA A/P TUMAR
UTM SUPERVISOR : CHM. DR. SITI AMINAH BINTI SETU

Company Backgrounds

KenEp Laboratories (M) Sdn. Bhd. has been established with the function as quality control laboratory to provide reliable analytical testing data that helps to monitor and verify the product quality, consistency and reliability. The laboratory also offers its testing services to the public. The testing services covered by laboratory included general Water and Wastewater Analysis, Industrial Effluent and Sewage Analysis, Palm Oil Mill Effluent Analysis, Drinking Water Analysis, etc

Job Scopes**Assist chemist during water testing**

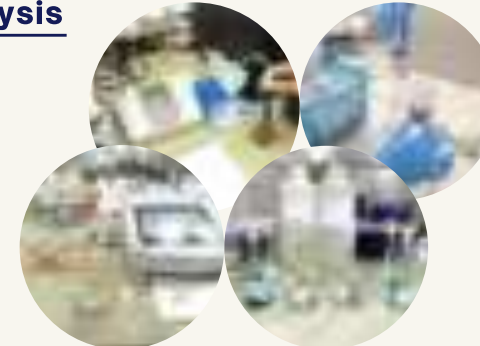
- Total suspended Solids
- Fluoride, cyanide, sulphide, chloride, etc

Helping monitoring team

- Photostat monitoring report
- Key in data monitoring into monitoring system report
- Arrange report according client

Wastewater and Water Analysis

- Turbidity
- Conductivity
- Colour
- pH testing
- Cyanide
- Chloride
- Test kit
- Sulphide
- Fluoride
- Total Dissolved Solid
- Phenols
- Total Suspended Solid
- Distilled Phenols

**Internship Project**

TITLE : PHENOL - TOTAL RECOVERABLE IN DRINKING, SALINE AND SURFACE WATERS, AND DOMESTIC AND INDUSTRIAL WASTES

Scope : The determination of total recoverable phenolic materials in drinking, surface and saline waters, and domestic and industrial wastes. Samples shall have undergone a preliminary distillation per EPA method 420.1.

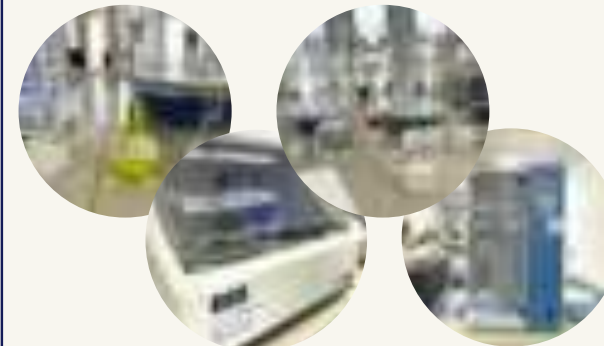
Principle : Phenolic compounds react with 4-aminoantipyrine and buffered alkaline potassium ferricyanide to form a red colored complex. The absorbance of this complex is measured photometrically at 505 nm.

Reagent Solutions

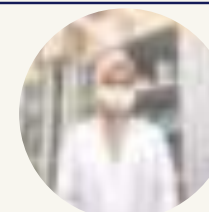
- Sulfuric acid
- 4-Aminoantipyrine
- Buffered Potassium Ferricyanide

Standard Solutions

- Phenol Stock Standard Solution
- Initial Acid Diluent
- Working Acid Diluent
- Intermediate Phenol Standard
- Phenol Top Standard

**Conclusion**

- Gained experience, new lab skills and knowledge
- Try new equipment/instruments used by industry
- Good Working Environment
- Learned the structure of organization
- Prioritizes and organized tasks



References :

1. Untang, M., Shiowatana, J., & Siripinyanond, A. (2010). A simple cyanide test kit for water and fruit juices. *Analytical Methods* 2(11), 1698-1701.
2. Bilotta, G. S., & Brazier, R. E. (2008). Understanding the influence of suspended solids on water quality and aquatic biota. *Water research*, 42(12), 2849-2861.



SELANGOR

AFCONA CHEMICALS SDN. BHD.



NAME: Cheah Ai Ming

MATRIC NUMBER A18SC0037

COURSE 3 SSCA

EMAIL cheahaiming5656@gmail.com

Company Background

AFCONA founded in 2005, as a joint-venture company between Netherlands, Malaysia and China. AFCONA produces the additives, as raw materials which supply to paint, printing ink, composite industries. Afcona Chemicals Sdn. Bhd. serves as a regional laboratory and office in Asia Pacific.

Contact Information

Address: 21, Jalan Anggerik Mokara
31/47, Kawasan Industri Kota
Kemuning, 40460 Shah Alam,
Selangor.

Tel: +603-5122 2289

Fax: +603-5122 8289

Email: afcona@afcona.com.my

Website: [http:// www.afcona.com.my](http://www.afcona.com.my)

Job Scopes

Paint Formulation Tests

- Draw down test
- Tinting Strength Test
- Pour out test
- Rub out test
- Stability test
- Viscosity Check
- Fineness of grind gauge

Instrumentations



Shaker



Grind Gauge



Dispermate



Solid Tester



Rheology Meter

Experiences

- R&D skills
- Team-working
- Communication skills
- Multi-tasking
- Waste management skills



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



FONG LI YEE



3 SSCA



fongliyee98@gmail.com



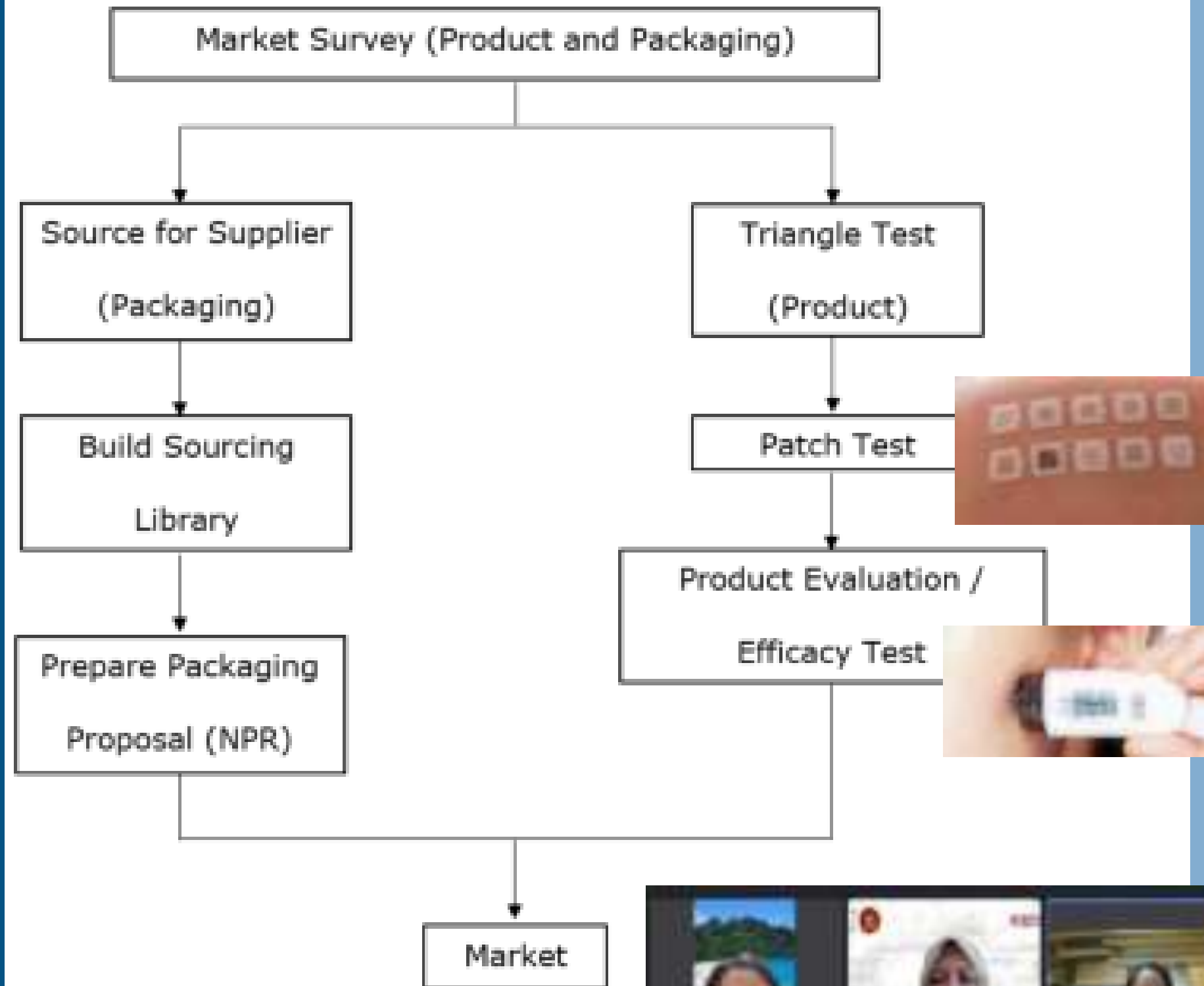
FACULTY SUPERVISOR

Assoc. Prof. ChM. Dr.
Shajarahtunnur Binti Jamil



INDUSTRIAL SUPERVISOR

Ms. Chan Wai Fang



EIG MANAGEMENT SERVICES SDN. BHD.

Lot 11, Jalan Astaka U8/88,
Bukit Jelutong, Seksyen U8,
40150 Shah Alam,
Selangor Darul Ehsan,
Malaysia

Tel: +603-7809 6688

Fax: +603-7809 6699

Website: www.estheticsgroup.com



DUOPHARMA BIOTECH BERHAD



DUOPHARMA BIOTECH BERHAD

Lot 2599, Jalan Seruling 59, Kawasan 3,
Taman Klang Jaya, 41200 Klang, Selangor
603 - 21620 218
recruitment@duopharmabiotech.com

FACULTY SUPERVISOR

Prof. Madya Chm. Dr. Shajarahunnur Binti
Jamil
Director Chemistry, Faculty of Science,
UTM.
shajarah@utm.my

INDUSTRY SUPERVISOR

Miss Shivashakti Selvarajan
Asst Manager/Pharmacist, Production
shivashakti-
selvarajan@duopharmabiotech.com



NUR AFRINA SAHIRA AZMI

PRODUCTION & QC INTERN

3 SSCA | A18SC0188.

afrina1999@graduate.utm.my



QUALITY CONTROL DEPARTMENT

HANDS ON TESTING;

1. Physical Testing on 7 batch of Glucoxit Tablet 500mg
2. Assay testing (titration) & identification test of Zhubee Vitamin C
3. Flame Atomic Adsorption Spectroscopy on B1 Haemo-sol.
4. stability study, and uniformity on Methazine tablet, testing using High-Performance Liquid Chromatography (HPLC)



Standard solution & sample preparation for Zhubee Vitamin C

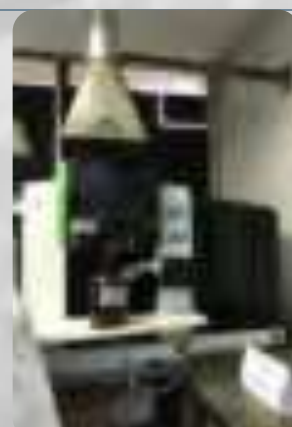


Sample Preparation of Methazine in powder form

INSTRUMENT IN QC:



SHIMADZU HPLC



FLAME-AAS



GC FID



FRIABILATOR

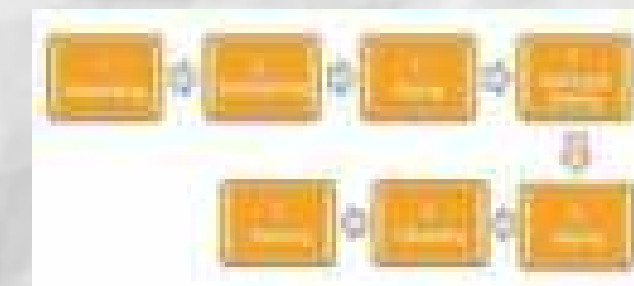


HARDNESS TESTER



DISINTEGRATION TESTER & SEMI-MICRO
BALANCE

PRODUCTION DEPARTMENT



- In production department, I experienced for the whole process to produce medicine in tablet/capsule form starting from dispensing process until packing.
- I gained knowledge about the whole production flow in pharmaceutical industry.

WASTE WATER TREATMENT SYSTEM

I visit the Wastewater Treatment System at engineering department. In this system, there were physical unit operations treatment methods, which use the application of physical forces to treat sewage. These include screening, mixing, flocculation, sedimentation, filtration and flotation.



PACKING & SERIALIZATION COVID-19 VACCINE

I join the team of serialization and packing process of Sinopharm COVID-19 vaccine from Beijing, China for local private market in cold room (2~8°C)





Nur Azimah Binti Nor Azlan
3SSCA

MERIEUX NUTRISCIENCES SDN BHD

(Formerly known as Acumen Scientific Sdn Bhd)

SUPERVISOR'S NAME

Company: Miss Cheng Pui Wah
Faculty: Prof. Madya Chm. Dr.
Shajarahtunnur Binti Jamil

ABOUT

A company that provides various analytical testing services like environmental, pharmaceutical, food and consumer product industries.

ADDRESS

Wisma Texchem, Lot 808 & 809,
Jalan Subang 5, Taman
Perindustrian Subang, 47610,
Subang Jaya, Selangor.



Job Scope
(Water Department)



- Performed BOD test
- Performed colour test
- Checked the pH
- Calibrated the pH meter
- Calibrated dissolved oxygen (DO) meter

Training Experience

1. Safety Training
2. Washing and Cleaning Training
3. Quality Control
4. Competency test



Instrumentations

1. UV-Vis Spectrophotometer (HACH DR6000)
2. High Performance Liquid Chromatography (HPLC)
3. Gas chromatography-mass spectrometer (GC-MS)
4. Inductively coupled plasma-optical emission spectrometer (ICP-OES)



Mini Project

Determination of heavy metals in wastewater by using ICP-OES

Contact Person

Name: Ms. Lim Lei Ee
Email: lei-ee.lim@mxns.com

RESEARCH TRAINING AT TOP GLOVE CORPORATION BHD

INTRODUCTION

I am currently undergoing Resesarch training at Top Glove Corporation Bhd. Currently undergoing training for Regulatory Affair System and Compliances (RA S&C) department, I was assigned to specific unit which is Harmonized Integrated Management System Conformance and Assessment (HIMS CA). RA S&C are department where we are the coordinator and establisher for Management System. Management System are a system that required for the company to follow the requirement by the customer in order to receive the certification by the certification body. Every management system will be audited by the certification body such as SIRIM, SGS, TUV SUD and many more. As for RA S&C, we will coordinate and lead for the management system audit meeting. RA S&C will provide all the document and regulations need by the auditor/ customer. I am undergoing research training from 26th July until 15th October 2021.

PROJECT

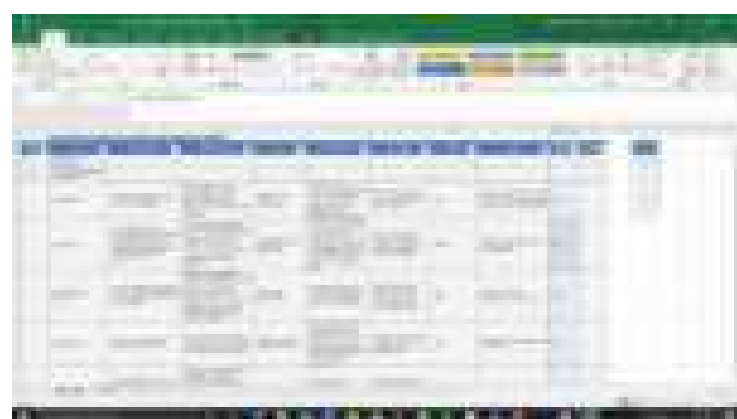
1- Gap analysis for Food Drug Administration Quality System Regulations (FDAQSR) and MDSAP

Objectives:

1) Identify and solve the challenge that they face in implementing the regulations required by the certification body or customer (USA/ MDSAP members).

Methodology:

1)Identify the department current issue > 2) Prepare gap analysis at Microsoft excel to solve problem



2- Implementation of Information Security Management System ISO 27001.

Objective:

1) To protect and secured all the data and information of company.

Methodology:

1)Regular meeting with RA & IT team > 2) Follow up PIC with ISMS task > 3) Apps developing in securing all tier of information



3- Findings from audit programs by the certification body

Objective:

1) To point out the findings, OFI and NC from the audit run.

Methodology:

1) Join the virtual audit meeting by SIRIM/SGS/TUV SUD> 2) Jotted down OFI,NC, findings for company use



SITE VISIT



THANK YOU!



M P O B

Malaysia Palm Oil Board (MPOB),
6, Persiaran Institusi, Bandar Baru
Bangi, Selangor

Internship Supervisor

- Pn Noorshamsiana Abdul Wahab
- Head of Biomass Technology Unit (Engineering & Processing Division)
- noorsham@mpob.gov.my | +603-8769 4460

University Supervisor

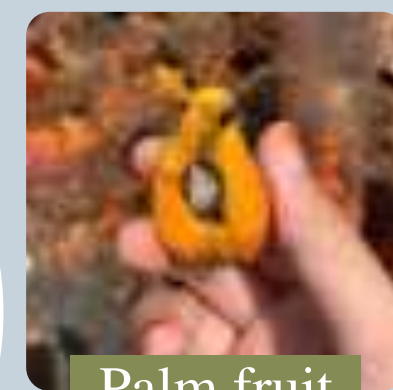
- Dr Juan Matmin & Dr Mohd Hamdi

Unit Latihan MPOB

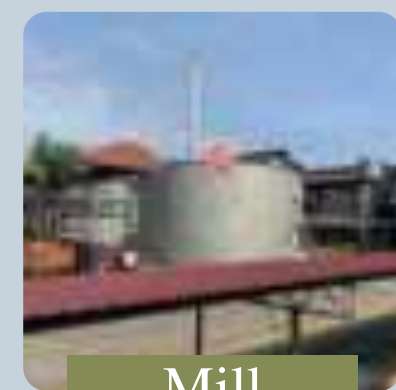
- Puan Noormazlina Molabakh
lina@mpob.gov.my | +603-8769 4325
- Puan Nurjanatun Gunawan
nurjana@mpob.gov.my | +603-8769 4967

RESEARCH TRAINING

NURUL SYAFIQAH BINTI ZAINUDIN | 3SSCA



Palm fruit



Mill

Mini Project

Green Method Extraction of Cellulose from Oil Palm Fronds (OPF) and its Characterisation

Analysis

FTIR, Thermal Gravimetry Analysis (TGA), Scanning Electron Microscope (SEM) & Elemental Analysis

Field Trip

Palm Oil Mill Technology Center (POMTEC) at Labu, Negeri Sembilan

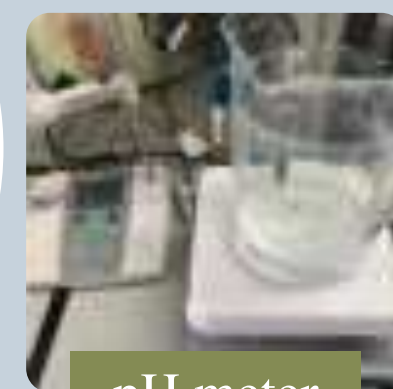


Job Scope

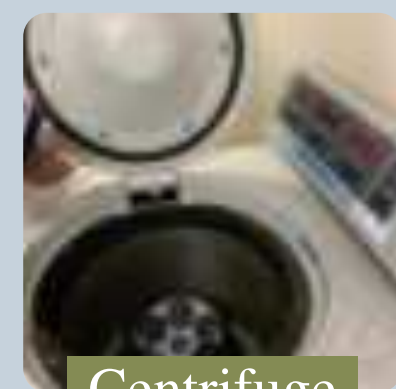
- pH meter handling
- Sample testing
- Data analysis
- Determination of α -cellulose content

New Experiences

- Learning new knowledge about oil palm tree
- Learning various methods for extractions of components in palm oil tree
- Visiting palm oil mill



pH meter



Centrifuge

PERMULAB SDN BHD

A-G-16, Merchant Square @ Tropicana, Jalan Tropicana Selatan 1, P20 3
47410 Petaling Jaya, Selangor

Tel: 603 - 7883 0068

Fac: 603 - 7883 0065

Website: www.permulab.com.my

COMPANY BACKGROUND

Permulab Sdn. Bhd was establish in 1996, one of the most diversified laboratories that play its major role in laboratory analysis in water, food, pharmaceutical, palm oil, cosmetics, microbiological and environmental.

Accredited under Laboratory Accreditation Scheme of Malaysia (SAMM) meeting the requirement of MS ISO/IEC 17025:2017

INDUSTRIAL SUPERVISOR

MS. YONG LI PENG

MS. NORHANIZA BINTI RAMLAN

FACULTY SUPERVISOR

TS. DR. NAJI ARAFAT BIN MAHAT

INSTRUMENTS

pH Meter - Eutech pH 2700

UV-Vis Spectrophotometer - Shimadzu UVmini-1240

Dissolved Oxygen Meter - YSI 5000

Conductivity Meter (Cyberscan Con 11)

Distillation Unit - Buchi B-324 Kjeldahl



TRAINING EXPERIENCES

FOOD ANALYSIS

PROTEIN TEST

ASH CONTENT DETERMINATION

VITAMIN D₃ EXTRACT

SUGAR TEST

ANISIDINE VALUE TEST

SPI TEST

MOISTURE CONTENT DETERMINATION

TRAINING EXPERIENCES

WATER ANALYSIS

NITRATE TEST

AMMONIA TEST

TOTAL SUSPENDED SOLID TEST

SULPHIDE DETERMINATION

TOTAL HARDNESS

BIOCHEMICAL OXYGEN DEMAND (BOD)

PHENOL CALIBRATION

CYANURIC ACID TEST

ADMI COLOR MEASUREMENT





UTM
UNIVERSITI TEKNOLOGI MALAYSIA



JOB SCOPE

As lab assistant in Quality Department.
Maintaining internal calibration records for all equipment on Equipment Register in ALSnet.

Ensure new equipment is entered into the Equipment Register was calibrated to ALS or SAMM specifications.

Document Control, all documents issued shall be registered, review, approval and arrange for distribution for ALS.



NURUL FATIHA BINTI MOHD TAHIR (A18SC0266)

COMPANY BACKGROUND

ALS Global is known as one of service providers in analytical laboratory testing.

ALS is an acronym to Australian Laboratory Services, showing that its main head quarter is based in Brisbane, Australia.

Full-service for analytical testing of samples from environment, food, microbiology, organic and inorganic

EXPERIANCE

New knowledge on how ALS Quality Department do their calibration and service of equipment.

Document control for the company record and data.

INDUSTRIAL
TRAINING
(QUALITY
DEPARTMENT)

COMPANY DETAILS

ALS Technichem (M) Sdn Bhd

Wisma ALS, 19 & 21 Jalan Astaka U8/84, Section U8

Bukit Jelutong, 40150 Shah Alam, Selangor

Tel: +603 7845 8257 Fax: +603 7845 8258

www.alsglobal.com



NUKLEAR
MALAYSIA

AGENSI NUKLEAR MALAYSIA -RAYMINTEX-



1

COMPANY BACKGROUND

The Malaysian Nuclear Agency is a leading research and development (R&D) organization in the field of nuclear science and technology in Malaysia which continues to play an active role and contribute to implementation and achievement of national science and technology policies.

3

JOB SCOPE

Quality Control Test for latex formulation
- Total Solid Content, Dry Rubber Content, Viscosity, pH, Alkalinity, Mechanical Stability Time and Tensile Strength.

2

WHAT IS RAYMINTEX?

RAYMINTEX Plant is a pilot plant that conducts vulcanization of natural latex using gamma radiation known as natural latex vulcanized using gamma radiation (RVNRL).

4

EXPERIENCES

- Quality Control Test for Latex
- Formulation of RVNRL using UV Radiation
- Handling the Instrument such as Universal Tensile Machine
- Overview Malaysian Nuclear Agency

COMPANY DETAILS

Agensi Nuklear Malaysia, 43000 Kajang, Bangi
+603-8911 2000
ukk@nm.gov.my
<https://www.nuclearmalaysia.gov.my/>

Nurul Syakirah binti Khusaini (A18SC0282)-355CC



RESEARCH &
DEVELOPMENT



PUBLICATION



COMMERCIALIZATION
OF TECHNOLOGY



EDUCATION &
TRAINING

MECHANICAL
STABILITY TIME



TENSILE STRENGTH

INSTRUMENTS

VISCOSITY



PH

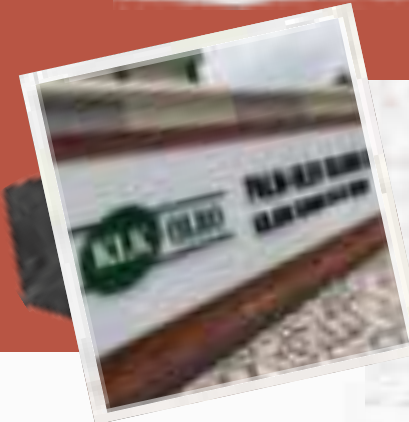


RESEARCH PROJECT

SSOC- Industrial Chemistry
 Nur 'Afifah Md Yusoff
 A18SC0184
 Faculty Supervisor: ChM DR. SHEELA A/P CHANDREN

About company

- KLK OLEO is one of the world's leading oleochemical producers that is committed to delivering excellence in the global marketplace.
- KLK OLEO's production portfolio ranges from basic oleochemical products, such as fatty acids, glycerin, fatty alcohols and fatty esters, all the way down the spectrum to specialties, such as methyl ester sulphonate (MES), surfactants and phytonutrients.



Palm-Oleo (Klang) Sdn. Bhd., Lot 1 & Bukit Raja Industrial Estate, 2, Solok Waja 3, Taman Perindustrian Bukit Raja, 41050 Klang, Selangor

+603 7809 8833

Industrial Supervisor: ChM. Dr. Vicit Rizal Eh Suk
 Researcher II Home and Personal Care KLK Oleomas Sdn. Bhd.

Job Scope

Research and Development Department
 (WFH Mode)



Characterizations Compilation



Instrument Webinar



- Proper literature review and how research take place to provide insights for improvements.
- Instrumentation online related to rheology characterizations.
- Computerized checklist by Excel.

Experiences

- Learn on how R&D department works.
- How to organize data and outputs in Excel accordingly.
- Learn the comparison and various ingredients and chemistry of emollients.
- Learn on how research take place and do proper report and writings.

AGENSI NUKLEAR MALAYSIA



NUKLEAR

1

BACKGROUND:

An agency under MOSTI - a leading research and development (R&D) organization in the field of nuclear science and technology in Malaysia which continues to play an active role and contribute to implementation and achievement of national science & technology policies.



RESEARCH & DEVELOPMENT



COMMERCIALIZATION OF TECHNOLOGY



EDUCATION & TRAINING



PUBLICATION

2

INTRODUCTION:

- The product based on latex such as balloons, gloves and baby teats are vulcanized.
- 3 types of vulcanization method that can creates cross linking and make the final products better with its properties.
- Sulphur vulcanization, peroxide vulcanization & radiation vulcanization.

3

JOB SCOPE:

Method used for this project is HYBRID VULCANIZATION in which it is the combination of Peroxide Vulcanization together with Radiation Vulcanization



FORMULATION



RADIATION



QC CHECK

4

INSTRUMENTS USED :



VISCOMETER



MST MACHINE



pH METER



THICKNESS



TENSILE MACHINE



Job scope

- Fully WFH (12 weeks)
- Conduct literature review based on the surfactants known as Sodium laureth sulphate (SLES) & Sodium lauryl sulphate (SLS) in Home & Personal care products.
- Properties studied:
 - Critical micelle concentration (CMC)
 - Foamability
 - Mildness
 - Viscosity

Supervisor Details

Industrial SV:-Dr Carmen Cheong Ai Mun
-Ms Yesotha Sellamuthu

Faculty SV: Dr Sheela Chandren

KLK OLEO

Introduction

KL-KEPONG OLEOMAS is one of the world's leading oleochemical producers that is committed to delivering excellence in the global marketplace. KLK OLEO is key sourcing and supply market such as in Malaysia, Indonesia, China and Europe that provide wide range of high quality products.

Contact Information

Address: 18, Fasa 2D, Pelabuhan Klang, 25, Jalan Sungai Pinang 5/11, Taman Perindustrian Pulau Indah, +2920 Pulau Indah, Selangor

Email: hr@klk.com.my

Phone: 03-3101 2633



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

PAVITRAN A/L JAGANAZAN
(A18SC0287) (3/SSCC)

Product types

- Amides
- Anionic surfactants
- Cationic surfactants
- Nonionic surfactants
 - Esters
 - Fatty acids
 - Fatty alcohols
 - Glycerine
 - Phytonutrients



Permulab Sdn. Bhd Industrial Training Infographic



Name : Nurul Sakinah Faizah Binti Rozmi No.Matric: A18SC0278 Course:3SSCC

Company Details
Permulab Sdn. Bhd A-G-16,
Merchant Square @
tropicana, jalan tropicana
selatan 1, pju 3, 47410,
petaling jaya Selangor
Tel :+603-7883 0068

Introduction
Permulab Sdn. Bhd. was founded in 1996 which focus on laboratory analysis of water, food, pharmaceuticals, palm oil, cosmetics, toiletries, microbiology.

Job Scope

- Determination Nitrite
- Determination of sugar
- Melamine test
- Determination Vit-C
- Benzoic and SorbicTest
- Total anionic and cationic active matter
- Heavy metal test
- Proximity test
- Ochratoxin A analysis
- pH test
- Brix Test



Instrumentation

- PCR - (LCMS/MS)
- GC/GC-MS - ICP
- HPLC -IC
- AAS
- ABSORBANCE MICROPLATE READER
- DR 5000 UV-VIS SPECTROPHOTOMETER



Field of Testing
4 different division from Environmental, Food, Water and Microbiological laboratory

HPLC PROTEIN DISTILLATION
www.companynama.com

RAYMINTEX PLANT, AGENSI NUKLEAR MALAYSIA

RAYMINTEX Plant produces Radiation Vulcanization Natural Rubber Latex (RVNRL) by irradiating with gamma radiation from Cobalt-60 source.

Research Project

- Ultraviolet-Vulcanization of Natural Rubber Latex (UVNRL)
- Type A UV irradiation



Introduction

- UV light is non-ionizing irradiation does not bound to strict regulation, easy to operation and maintenance thus contribute to lower cost to end product.
- Sulfur free vulcanization and the products free from nitrosamines
- UVNR latex crosslinking based on free radical mechanism.



Research Objective

- To develop latex formulation and process parameter for Ultraviolet Vulcanization of natural rubber latex with a tensile strength of a minimum 18MPa using UV irradiation.
- To study the potential of photoinitiator and time taken of UV irradiation in enhancing the crosslinking reaction.
- To determine the physical and mechanical properties of UVNRL as required by international ISO standards.

Job Scope

1. Latex formulation
2. UV Irradiation
3. Quality Control Test
4. Tensile Strength Test



Conclusion

- Give new experience on conducting a project from R&D until end product.
- Able to involve in the process of RVNRL production based on customer requests & handling the instrument.



NEGERI SEMBILAN



VNI Scientific Sdn Bhd

ADDRESS

VNI SCIENTIFIC SDN. BHD.
LOT 16 & 17, JALAN PP IXORA 3,
PUSAT PERNIAGAAN IXORA,
70450 SENAWANG, NEGERI
SEMBILAN

INDUSTRIAL SUPERVISOR'S DETAIL:

NURAINAA HERLYSA
Head of Operations

FACULTY SUPERVISOR'S DETAIL:

- DR. MOHD FUAD BIN MOHAMAD
- DR. WAN MOHD ASYRAF BIN WAN MAHMOOD

STUDENT'S DETAIL:

- ALIA NATASHA BT ANWAR MUSADAD
- A18SC0015
- 3/SSCA



INDUSTRY'S BACKGROUND

VNI SCIENTIFIC SDN. BHD. is an established GMP OEM manufacturer with experience in formulating variety of products started with color cosmetics, skincare, mask and treatment, hair products, baby products, fragrance, and also aromatherapy products.

JOB SCOPE

• Sample preparation.

Making samples based on clients' requirement and thoroughly understand the formulation of every sample.

INSTRUMENTS



VISCOMETER

↓
To measure viscosity of sample in mPa.



OVEN

↓
To observe stability of sample under hot condition.



HOMOGENIZER
MACHINE

↓
To homogenize sample into very small particle.

SAMPLE HANDS-ON



SERUM



LIP BALM



CLAY MASK STICK



LIP OIL

EXPERIENCE

• Apply knowledge.

Enhance in the knowledge of colloidal chemistry, which is oil-in-water (O/W) and water-in-oil (W/O) emulsion, the stability of emulsion, and the emulsifying agent.

• Working environment.

Friendly environment in the R&D Department enabled me to complete my internship despite having a lot of works to accomplish.

VNI Scientific SDN BHD is the ideal partner and trusted GMP and OEM manufacturer. They assist clients in the formulation, conception for halal cosmetics and skincare, production and packaging. Types of products manufactured include a series of colour cosmetics and skincare products with advanced biotechnology.

EXPERIENCES

- Experienced working in the real cosmetic industry environment
- Enhance the observation skill in determining the possible defects in each cosmetic product
- Had learnt several documentations in Quality Control (QC)

TRAINING AND JOB SCOPES

Quality Control

- Locate and identify the defects of the product
- Establish standards of quality that are acceptable to clients
- Ensure the defective items are not used
- Evaluate the quality standards of incoming materials, products in actual manufacturer and outgoing products
- pH testing for raw materials

Production

- Packaging
- Filling process for cosmetic products

INSTRUMENTATION/MACHINES



Semi Auto Piston Liquid Filling machine



Digital Semi Auto Control Liquid Filling machine



Prepared by :
Ayu Norfatimah Binti Abd Wahab
(3 SSCA)

Faculty Supervisor :
Dr. Mohd Fuad Mohamad
Dr. Wan Mohd Asyraf Wan Mahmood

INTRODUCTION OF COMPANY

ON Semiconductor which has been rebranded to **onsemi** is a leading semiconductor manufacturer with more than 80,000 different components and provides to tens of thousands of customers throughout multiple fields.

Die sales department: This department specializes in the sawing and singulating wafers into individual dies. The dies are then delivered to the customers upon completion of the desired process flow.

ONLINE INDUSTRIAL VISIT BY FACULTY SUPERVISOR



ON SEMICONDUCTOR MALAYSIA SDN. BHD

LOT 122, SENAWANG INDUSTRIAL ESTATE, 70450 SEREMBAN, NEGERI SEMBILAN



JOB SCOPE

1. Learning the process of wafer sawing.
2. Learning the important criteria such as wafers, blades, UV tape and cutting water involved in the process.
3. Learning other processes involved in the semiconductor industry such as wire bonding, die bonding, plating, molding and taping & reeling.
4. Assisting supervisor in conducting final analysis of devices and collecting data for certain processes.
5. Conducting research in order to carry out project on UV tape evaluation.
6. Collecting requires data for analysis and evaluation on project given.

EQUIPMENTS USED



Lesson Learnt:

- Time management
- Communication skills
- Work ethics
- Quality Management System Awareness Training
- ESD Awareness Training for Manufacturing

PROJECT

Project given: Evaluation of UV Tapes

Objective: -saw 3 wafers with 3 different UV Tapes respectively.
-collecting data and studying the yield for each wafer
-comparing and determining the quality of the new tape with existing tape in production



ABOUT ME:

NAME:

KALISHINI ASMETTA
A/P JEEVARAJ

COURSE:

3SSCA

INDUSTRY SUPERVISOR:

MR. PUVANESWARAN
SILWARAJOO

FACULTY SUPERVISOR:

DR. SITI ERNIEYANTI
HASHIM



Job scope (QA Inspection- Incoming Packing Material):

- Upkeep and maintain the smooth running and documentation of the QA department
- Investigate source of product non-conformance, analyze the problem and recommend action to be taken
- Perform analysis and resolution of manufacturing quality problem.

Experiences:

- Learn Incoming Packing Material Process
- Learn Incoming Packing Material Assessment
- Learn Outgoing Packing Material Process
- Learn Outgoing Packing Material Assessment
- Learn type of defects for incoming packing material

NAME:

WOON SOCK LING

MATRIC NO:

A18SC0348

COURSE:

3SSCC

FACULTY

SUPERVISOR:

DR MOHAMAD SHAZWAN SHAH JAMIL

INDUSTRIAL

SUPERVISOR:

MR LIM KIN HUA
(QA MANAGER OF UGGR)

Contact information:

- 📍 Lot 62 & 63, Lorong Senawang 3/2, Kawasan Perindustrian Ringan Senawang, 70450 Seremban, Negeri Sembilan
- ☎ 06-6760450
- ✉ hr@unigloves.com.my

UG GLOBAL RESOURCES SDN BHD



LOT 16 & 17, Jalan PP Ixora 3, Pusat Perniagaan Ixora,
70450 Senawang, Negeri Sembilan



Phone: 013-266 6021

PREPARED BY - MUHAMMAD SHARUL BIN ABD RAHIM | 3SSCC | A18SC0153

FACULTY SUPERVISOR

DR. MOHAMAD FUAD BIN MOHAMAD
DR. WAN MOHD ASYRAF WAN MAHMOOD

INDUSTRIAL SUPERVISOR

MISS AINAA HERLYSA

COMPANY BACKGROUND

VNI SCIENTIFIC WAS INCORPORATED IN JANUARY 9, 2017 UNDER THE COMPANIES ACT, 1985 (COMPANY NO. 1215100-M). THE COMPANY MANUFACTURES A SERIES OF COLOUR COSMETIC AND SKINCARE PRODUCTS WITH ADVANCED BIOTECHNOLOGY. THE COMPANY IS GMP CERTIFIED BY MINISTRY OF HEALTH AND HALAL CERTIFIED BY JAKIM. ADDITIONALLY, VNI SCIENTIFIC MANUFACTURE RANGE OF PRODUCTS THAT USE PURE NATURAL, VEGAN AND ORGANIC INGREDIENTS. ALL WHICH HAVE UNDERGONE RIGOROUS HEALTH AND SAFETY TESTS. VNI SCIENTIFIC IS A FAMILY BASED, WHOLLY OWNED (100%) BUMIPUTERA COMPANY. VNI SCIENTIFIC INSPIRES TO BECOME THE KEY PLAYER IN THE BEAUTY INDUSTRY BY DOMINATING ASIA'S MARKET.

EXPERIENCES

- WORKING EXPERIENCED IN REAL COSMETIC INDUSTRY ENVIROMENT
- GAIN NEW KNOWLEDGE ABOUT RAW MATERIAL INVOLVE IN COSMETIC INDUSTRY ENVIROMENT
- ENHANCE THE MIXING SKILLS ABOUT MIXING RAW MATERIALS FOR SOMETHING PRODUCTS (EG : HAND SANITIZER & DISINFECTANT)
- HAD LEARNT ABOUT QUALITY CONTROL WORKS



TRAINING AND JOB SCOPES

PRODUCTION (GMP MANUFACTURE)

- MIXING THE PRODUCTS (PH TESTING AND MIXING RAW MATERIALS)
- FILLING THE PRODUCTS (USING MACHINE / INSTRUMENTS)
- CODING THE PRODUCTS
- PASTING A STICKERS
- PACKAGING

QUALITY CONTROL

- LOCATE AND IDENTIFY THE DEFECTS OF THE PRODUCTS
- ESTABLISH STANDARDS OF QUALITY THAT ARE ACCEPTABLE TO CLIENTS
- ENSURE THE DEFECTIVE ITEMS THAT NOT BEEN USED

INSTRUMENTATION / MACHINE USED





INTERNSHIP INFOGRAPHIC



COMPANY BACKGROUND

An established and professional manufacturer for latex and nitrile glove located in Seremban, Malaysia.



JOB SCOPE



- Physical dimension test
- Physical requirement test
- Thermocouple verification
- Oven controller verification
- Infrared thermometer verification
- Mercury-in-glass thermometer verification
- Weighing machine verification

INTERN LIFE

Prepared by:
Lim Chee Hern

Industry's Supervisor:
Mr. Fabian Lee Kok Wai

Faculty's Supervisor:
Dr. Mohamad Shazwan Shah Jamil



Manufacturer of gloves which was established in 1982 and headquartered in Malaysia.



812
production line



195
export countries



2,000
customers



Supervisors Details

Industrial's Supervisor

Chok See Yee
Chemist, R&D

Faculty's supervisor

Dr. Siti Erniedyanti Binti Hashim

Job Scope



Assist in R&D study for value added, regulatory compliance, quality improvement, or cost reduction of existing products.



Perform all necessary evaluation and physical or mechanical tests for glove, raw material, or former.

Carry out routine testing or analysis in order to provide reliable and precise data to support scientific investigations.

Raw Materials Testing

- Total Solid Content (TSC) test
- Latex compounding & hand-dip

In-process Testing

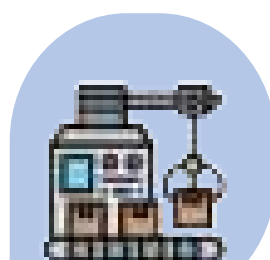
- Heat and chemical stability test
- Latex sedimentation

Finished Product Testing

- Colour meter test
- Aging test
- Alcohol test
- Powder residue test
- Moisture content test
- Physical properties (tensile) test
- Overall Migration Test (OMT)



01



02



03

Projects

1. ENW Gloves Natural Aging
2. Carbon Disulphide Content in Gloves Study (Netherland Requirement)
3. Calcium Carbonate Filler Performance Evaluation Study

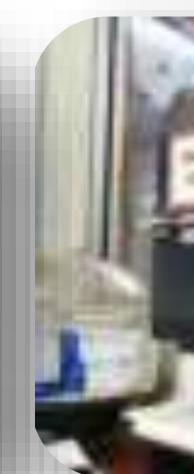
Instruments



Spectrophotometer



pH meter



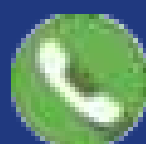
Dumbbell



Thickness Gauge



Tensile Machine





MALACCA

INTERNSHIP JOURNEY



Nuzrahul Najwa binti Saedun
A1555C0164
2021CA

Barjeeran Perindustrian (Rangkaian)
Kawasan 2, 26300 Seremban (Johor),
Malaysia
03-262-2000
http://www.petronas.com



Company Overview

Malaysian Refining Company Sdn Bhd (MRCSB)

MRCSB is a PETRONAS subsidiary involved in the full spectrum of downstream activities. The PETRONAS Second Refinery (SR) is incorporated in 2001 and has a capacity of 900,000 barrels of crude oil per day.

Some of its primary products included:

- Motor gasoline
- Lubricants
- LPG
- Naphtha
- Chemicals
- Sulphur
- Jet Fuel
- Coal
- Bitumen

Job Specifications

Instruments Introduction



- To acquire about the components that make up the system and their respective functions
- Operating mechanism

Samples Preparation



- To provide aliquants that are free from contamination
- Samples prepared in accordance to applicable standards methods

Project

Determination of Organic Chloride Content in Crude and Vacuum Gas Oil (VGO) Samples Via Combustion and Microcoulometry

Organic Chloride Analysis



- To set up organic chloride test for every sample



Instruments Operated



PAC-Herzog OptiDist (Crude)



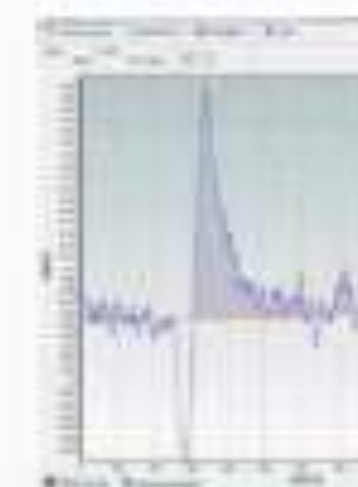
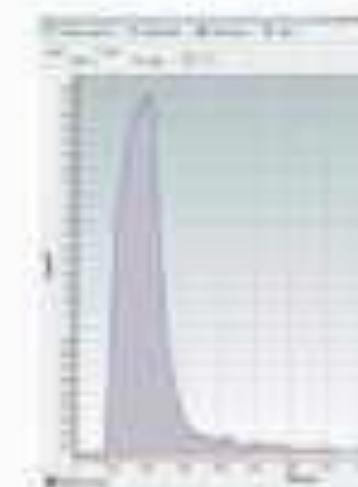
Seta Oil Test Centrifuge (VGO)



TSHR TX 6000 (Organic Chloride)

Findings

Sample Name	Date	Date of Sample Obtained	Concentration (mg/L)	Mean	Standard Deviation
Crude Oil	15/08/2021	15/08/2021	4.28	4.56	0.11
		15/08/2021	4.52		
		15/08/2021	4.54		
		15/08/2021	4.32		
		15/08/2021	4.27		
	20/08/2021	20/08/2021	2.21	2.30	0.05
		20/08/2021	2.24		
		20/08/2021	2.26		
		20/08/2021	2.07		
		20/08/2021	2.03		
22/08/2021	22/08/2021	4.09	4.03	0.05	
	22/08/2021	4.07			
	22/08/2021	4.10			
	22/08/2021	3.98			
	22/08/2021	3.99			
24/08/2021	24/08/2021	1.50	1.46	0.12	
	24/08/2021	1.52			
	24/08/2021	1.54			
	24/08/2021	1.51			
	24/08/2021	1.53			



Sample Name	Date	Date of Sample Obtained	Concentration (mg/L)	Mean	Standard Deviation
VGO	25/08/2021	25/08/2021	0.16	0.07	0.02
		25/08/2021	0.22		
		25/08/2021	0.20		
		25/08/2021	0.17		
		25/08/2021	0.15		
	26/08/2021	26/08/2021	0.27	0.03	0.04
		26/08/2021	0.25		
		26/08/2021	0.24		
		26/08/2021	0.26		
		26/08/2021	0.23		

Lesson Learnt

- Comprehending the importance of organic chloride reduction in refinery
- The process of detecting organic chloride in crude and vacuum gas oil (VGO) samples
- Self-responsibilities I might encounter in my chosen field

SUPERVISORS

Faculty : Dr. Siti Enayati binti Hashim (enayati@putra.mypn.gov.my)
Company : Mr. Mohd Izad bin Sulaiman (izad_sulaiman@petronas.com.my)

MY LIFE AS AN INTERN IN ...

BIO TREE BIOTECHNOLOGY SDN BHD



DATE : 1 JULY 2021 - 1 OCTOBER 2021

FACULTY SUPERVISOR : DR SITI ERNIEYANTI BINTI HASHIM

INDUSTRIAL SUPERVISOR : PUAN NOORAIN BINTI ZULKAPLI

IZATUL NORNABILAH BINTI JAMIL | 981208-02-7108 | A185C0075 | 3 SSCA | SSCU 3915



ABOUT COMPANY

A biotechnology company, founded on 2010 by Mr Yee Yaw Khim. Focusing on bio fermentation products and now producing beverage and vinegars - all with bio fermentation elements. Located at Taman Perindustrian Masjid Tanah, 78300 Melaka, this company offers more than beverages production only.

BUSINESSES & SERVICES

ODM (Original Design Manufacturing), OEM (Original Equipment Manufacturer), Contract Manufacturing, Lab Testing and Quality Control, Random formulation/ prototype, Product Registration, Export Documentation

TRAINING AND JOB SCOPES

PRODUCTION ACTIVITY | LAB WORK | PACKING ACTIVITIES | FARM WORK

THINGS LEARNT DURING INTERNSHIP PERIOD



- Handled huge and fast machines
- Involved in lab work and learnt how food related to chemistry
- New experiences about industrial life and technologies
- Quality control on products

PRICELESS EXPERIENCES

I have learnt a lot in handling production activities, some research through microbe test and acidity test and doing quality control test. Apart from that, I learnt how temperature can affects a lot things during product processing activities

SUMMARY OF INDUSTRIAL TRAINING

Internship life has opened my eyes to the exposure of real life working environment, widen the networking and exchange ideas and knowledge with staffs and other interns in solving certain problems





KOTRA PHARMA (M) SDN.BHD. QUALITY CONTROL DEPARTMENT



YEOH YING SHIN
A18SC0351
3 SSCA

Faculty SV: Dr Sheela Chandren
Industrial SV: Mr Ankit Gupta



COMPANY BACKGROUND

TRAINING SCOPE

- Sample Preparation
- Various Quality Control Tests
- Preparation and Standardization of VS

SKILLS

- Team Work
- Hands On Practice
- Communication

INSTRUMENTATION



+606-3362222

www.kotrapharma.com

hr@kotrapharma.com

1,2&3, Jalan TTC 12, Cheng Industrial Estate, 75250, Malacca, Malaysia



NURUL SYAFIQAH BINTI BAHARI
A18SC0279
3SSCC

SUPERVISOR DETAILS

FACULTY : DR SITI ERNIEYANTI
 BINTI HASHIM
INDUSTRY : PN. NOORAIN BINTI
 ZULKAPLI

BIO TREE BIOTECHNOLOGY

Founder: Mr Yee Yeaw Khim
 (2010)
 Focus: Natural Biofermentation
 & Food Supplement
 Location: Kawasan
 Perindustrian Masjid Tanah, Alor
 Gajah, Melaka

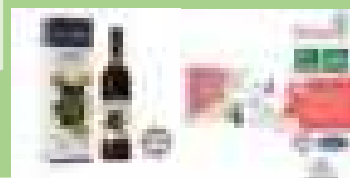


TRAINING SCOPE

1. Preparing Raw Materials
 Process by extracting juices from fruits,
 measuring other raw materials.
2. Production
 Boiling the ingredient, quality checking &
 filling products.
3. Labelling & Packaging Products
 Label with product details & expiry date.
 Boxing and wrapping for transport.
4. Lab Testing
 Fermentation process, microbe test and
 determine level of acidity.

SPECIALIZE IN

1. Food Supplements
2. Functional Beverages
3. Vinegars & Ferments

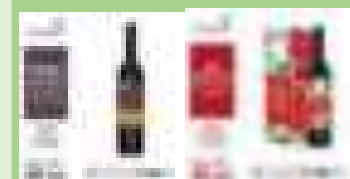


PRICELESS EXPERIENCES

1. Exploring new knowledge
 in the industry
2. Able to use some
 instrument/machine
3. Able to manage work
 according to time
4. Staff are friendly and
 always helping me in
 many ways

PRODUCTS & SERVICES

1. CUSTOM
 FORMULATION/PROTOTYPES
2. ODM/OEM MANUFACTURE
 SERVICES
3. LAB TESTING & QUALITY
 CONTROL



THINGS LEARNT

1. Self-Starter
2. Critical Thinking
3. Maintain Professionalism





JOHOR



Introduction

Almahdi Huzairi Bin Ramli
40203A
A170020004

Supervisors

Industry: M. Huzairi Bin Ramli
Faculty: U. Ghani Bin Fauzan Bin Abdullah

Division

Laboratory

Internship Duration

3 months

ADDRESS

Lorong Sawit Sains, Johor Port Area, 81700
Pasir Gudang, Johor



About Company

FGV Johor Bulkiers Sdn. Bhd. Which formally known as FELDA-JOHORE BULKERS SDN BHD was established on 9th October 1974 as a company that provides handling and storage services in bulk for vegetable oils from other company. There are five categories of oils that being handled by FGV which is crude, processed oils, oleochemicals & biodiesel, acid oils and special quality products. FGV also provide one stop centre for forwarding services and transshipment activities. These services help clients meet the growing challenges of product quality, safety, environmental protection issues and social responsibility.

LIST OF ACTIVITIES

- Sampling
- Testing
- Plant operation
- Skimming
- Reporting

JOB SCOPE

- Ensuring the plant working as intended
- Assisting lab analyst to do sampling of waste water treatment plant
- Assisting lab analyst to perform test of incoming oil sample
- Assisting lab assistant to do report writing regarding on the operation of waste water treatment plant.

AIDA AZIZAH BINTI MOHD KHAIRI | A18SC0004 | SSCA

SUPERVISOR

University Supervisor:
ChM. Dr. JoazaizulFazli
Bin Jamalis

Industrial Supervisor:
Pn. Sa'Diah Bt Ad
Ghapur

JOB SCOPE

- Analyse water sampel from RAW water, Service Reservoir Outlet, Treatment Plant Outlet and Reticulation System for several parameters
- Sorting water sample bottle
- Mini Project



MINI PROJECT

- Title: Analysis of Total Dissolve Solid
- Objective: To compare and analyze differences in total dissolved solids (TDS) values using two different methods
- Method Used:
 - APHA Method 2540 C
 - HACH Method - Direct measurement



1

2

3


4

5

6

COMPANY

Water Quality Deptment of Ranhill SAJ Sdn Bhd monitors and ensures the quality of water suplied to coustomer are within the guideline set by the Ministry Of Health

 Location: Makmal Pusat Ranhill SAJ
Lot 4705, Kawasan Perindustrian Sri Gading, Batu 6, Jalan Kluang, 83300 Batu Pahat, Johor

 Contact: 07 - 4554726



INSTRUMENT

- Spectrometer -
 - DR 6000 & DR 3900
- Autotitrator
- TDS Meter
- Gas Chromatograpy - Mass spectrometry
- Inductive Couple Plasma - Mass Spectrometry
- Ion Chromatography - Mass Spectrometry

EXPERIENCE

- Gained knowledges and skill in performing severals tests to determine water quality.
- Informed about instrument used for analysis
- Able to practice laboratory work ethics, precaution steps and procedure





DEPARTMENT OF ENVIRONMENT

JABATAN ALAM SEKITAR NEGERI JOHOR CAWANGAN KLUANG
TINGKAT 3 & 4, BANGUNAN ALLIANZ BUSS MALAYSIA NO.270,
JALAN MERSING, 86000 KLUANG JOHOR

INTRODUCTION: Department of Environment Cawangan Kluang has been established since middle of 2004. In 2005, the department has a strength of 9 employees and 1 branch manager. From November 2020 till now, only 8 employees left including 1 branch manager. The enforcement team in Department of Environment Cawangan Kluang covered the enforcing activities around Kluang and Mersing state under Majlis Perbandaran Kluang (MPK), Majlis Perbandaran Simpang Renggam (MPSR) and Majlis Daerah Mersing (MDM). Department of Environment Cawangan Kluang covered various of job scope including annually inspection twice a year which are 15 DUM check and 2 tube well of every factory assigned under this department. Besides that, the department also investigate and clean in Mersing's islands and beaches if there is any oil spillage occurred, hotspot investigation of Hutan Simpan in Endau, Mersing and Jemaluang, processing an Application of Written Notification and Written Declaration (IETS, AKPU and APB), processing an Application of Management of Scheduled Waste and Application of Desludging (KKS).

AIREEN NURNILAM ATHILAH BINTI
KHAIROL FAUZI (A18SC0010)
JSSCA

INDUSTRY SUPERVISOR: PUAN AZIZAH BINTI GIMAN
FACULTY SUPERVISOR: ASSOC. PROF. DR. LEE SIEW LING

JOB SCOPE UNDER ENFORCEMENT DIVISION

KEY IN ALL THE LETTERS RECEIVED

COMPLAINTS OBSERVATION

SITE VISITS AND INSPECTION

REVIEWING DOCUMENT RELATED TO APPLICATION FROM FACTORIES

SITE VISITS INSPECTION

BENEFITS GAIN

TEAM WORKING SKILLS
Manage to learn how to cooperate with other people to achieve the task given

COMMUNICATION SKILLS
Manage to polish communication with people from various background and learn something new from them

PROBLEM SOLVING SKILLS
Manage to solve problem that requires high order thinking skills for the task given by supervisor

ADAPTABILITY
Manage to adapt with the working environment and the culture applied there



SITE VISIT TO PALM OIL PROCESSING AT SIMPANG RENGAM FOR COMPLIANCE AND NON-COMPLIANCE UNDER EQA 1974



SITE VISITS AND WATER SAMPLING AT TAPAK PELUPUSAN SISA PEPEJAL LADANG CEP, SIMPANG RENGAM, JOHOR DARUL TAKZIM



OPEN BURNING COMPLAINTS AROUND NEIGHBOURHOOD AREA IN MERSING



SITE VISITS TO KLK BERHAD KEKAYAAN COMPLEX TO LEARN ABOUT THE PRODUCTION OF PALM OIL AND PALM FRUITS



INTERNSHIP INFOGRAPHIC



PREPARED BY: AMIRUL AKIL BIN ABDUL AZIZ (A18SC0021)

COMPANY: INNOCHEMS TECHNOLOGIES SDN BHD

COMPANY BACKGROUND

- FOUNDED IN 2011
- INNOCHEMS TECHNOLOGIES SDN. BHD IS A MALAYSIA'S FAST-DEVELOPING SPECIALTY & CUSTOMIZED CHEMICALS PRODUCER AS WELL AS SERVICE AND TECHNOLOGY PROVIDER TO GAS, OIL, PETROCHEMICALS AND PETROLEUM RELATED INDUSTRIES.

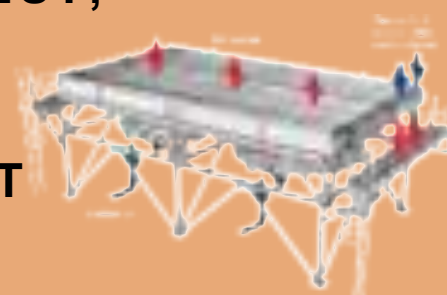


VALUABLE MEMORIES/EXPERIENCED

- JOINS PROJECT AND ENTER REFINERY SITE AT PORT DICKSON
- GOT SPONSORED TO ATTEND OIL AND GAS PASSPORT COURSE

JOB SCOPE/TASKS

- STUDY AND LEARN VARIOUS OF CHEMICAL PRODUCTS PRODUCE BY COMPANY.
- DO VARIOUS OF SAMPLE TESTING (COD, SULFIDE TEST, AMMONIA TEST, OIL AND GREASE TEST ETC)
- WASTE MANAGEMENT/TREATMENT
- STUDY AND LEARN VARIOUS OF EQUIPMENTS (HEAT EXCHANGER, AIR FIN COOLER ETC)



EXAMPLE OF PRODUCTS THAT ARE FAMOUSLY KNOWN:





PERSONAL DETAILS

Name: Che Muhamad Faris Rifqi bin Che Suhaimi
 Matric Number: A18SC0036
 SV Faculty: CHM. DR. SUSILAWATI BINTI TOEMEN
 SV Company: MRS. FARHANA BINTI IBRAHIM

DEPARTMENT IN COMPANY

1. Human Resources and Administration (HRAD)
2. Quality Assurance, Quality Control (QA, QC)
3. Plant, Production & Operation
4. Safety & Health
5. Logistic & Shipping
6. Maintenance & Project

COMPANY DETAILS

- Vance Bioenergy Sdn Bhd is one of the oleochemical manufacturer that located at Pasir Gudang Industrial Estate of Johor, Malaysia.
- Specialises in making fatty acid methyl ester (Vance Biodiesel), pharmaceutical-grade refined glycerin (Vance Refined Glycerine), and other oleochemical compounds such as Fortrienol, which is Vitamin E, and surfactant, cocodiethanolamide (CDE).
- A founding member of the Malaysian Biodiesel Association (MBA) and a member of the Roundtable on Sustainable Palm Oil since 2006.

Certificate

- | | |
|--------------------------------------|--|
| • ISO 9001 | • Hazard Analysis Critical Control Point (HACCP) |
| • ISO 22000 | • Halal |
| • Good Manufacturing Practices (GMP) | • Kosher |

Daily Routine

- Sludge Volume in 30 Minutes (SV 30)
- Mixed Liquor Suspended Solid (MLSS)
- Mixed Liquor Volatile Solid (MLVSS)
- Chemical Oxygen Demand (COD)
- pH testing



Bio Synergy Laboratories Sdn. Bhd



Company Background

Bio Synergy Laboratories Sdn. Bhd. (Subsidiary of DXN Groups) was established in 2013 and has started to operate as commercial testing laboratory providing testing service to internal DXN group companies and external clients.

The company business involves chemical testing, petroleum analysis, microbiology analysis, mercury analysis, fats and oils product test, food safety test, environmental safety test, occupational health and safety consultation environmental monitoring.

Contact Information

Southern Region Lab

Address: No. 7, Jalan Mutiara Emas 6/1A, Taman Mount Austin, 81100 Johor Bahru, Johor.

Telephone no.: 07-3518666

Fax No.: 07-3595353

Email: labadmin.jb@biosynergy.com.my

Website: <http://www.biosynergy.com.my/>

Job scope

Petroleum Analysis

- Kinematic Viscosity
- Cloud Point
- Pour Point

Water Analysis

- pH and Temperature
- Colour Pt-Co
- Colour ADMI
- Ammoniacal Nitrogen
- Total Suspended Solid
- Oil and Grease
- Phenol
- Chloride

Experience

- Analysis of petroleum sample
- Analysis of water sample
- Calibration of pH meter
- Improvement on laboratory skills
- Enhancement of communication skill
- Multitasking

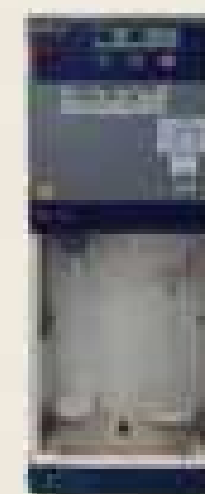
Instrument



NK-3535
Multifunction Low
Temperature
Tester



NK-265A Kinematic
Viscosity Apparatus



Njeltec 2100
Distillation Unit



Edge Multiparameter pH
meter - HI2020



HACH DR6000
UV-Vis
Spectrophotometer

Industrial supervisor

ChM Nurul Shafika Binti Ahmad Ihsan

Faculty supervisor

Prof. Madya Dr. Roswanira Abdul Wahab

Personal Detail

Chew Yee Qian, Janice

3 SSCA

A18SC0039

qian_98717@hotmail.com



RESEARCH TRAINING

Fatin Azmira Huda Bt Md Ontong
A18SC0055
Pure Chemistry

COMPANY:

Makmal Pusat Ranhill SAJ Sdn Bhd,
Kawasan Perindustrian Sri Gading, 83300 Batu
Pahat, Johor.
Email : makmalpusat@ranhill.com.my
Contact : 07-4550726

COMPANY MISSION AND POLICY:

Mission : We will continue to provide satisfaction
to customer and shareholder by optimizing
existing resources and providing quality services.
Policy : The treated water supplied is safe to use.

INDUSTRY SUPERVISOR:

Madam Sa'diah bt Ad Ghapur

FACULTY SUPERVISOR:

Chm Dr Joazaizulfazli
Bt Jamalís.



Analysing Sample

11/7 - 30/9/2021

WATER
QUALITY
ANALYSIS
OPERATIONS

MINI
PROJECT

VISIT TO
WATER
PLANT
SRI GADING

Water Quality Analysis Operation :

- Conduct water quality analysis covering parameters chemistry and microbiology
- Prepare sampling bottles
- Proficiency Test

Parameter determination

- Fluoride
- Ammonia
- Color
- Cyanide
- Sulphate
- E.Coli & Total coliform
- Chemical Oxygen Demand
- Nitrate
- Total Nitrogen
- Hardness
- Chloride



Water Sample

Mini Project : Colour in Water

Objective : To distinguish the apparent colour and true colour in RAW, SRO AND TPO water sample.

Method : HACH METHOD

Instrument : DR6000

Caution : Water sample must less than 48 hour to analysis.

MOH Guidelines for parameter Colour

Raw water : < 300 TCU

Drinking water : <= 15 TCU



Filtration

Visit to Water Plant Sri Gading

Water Treatment Process in general

- Aeration
- Coagulation motor stirrer
- Flocculation
- Sedimentation-Horizontal Type
- Rapid Sand Filter & Auto Backwash
- Clear Water Tank



Flocculation

Jar Testing Method
SCBA Training



Jar Test

Company Profile: Onelab Testing Sdn Bhd

Onelab Testing is an MS ISO 17025:2017 accredited laboratory that provide various analysis, including food, water, microbiological, and environmental analysis in diversified industries.

Priceless experience:

- Exposed to working environment
- Gained new knowledge about testing
- Allowing to make mistakes

Contact info:

Address: No 10A, Jalan Tanjong 2, Taman Desa Cemerlang, 81800 Ulu Tiram, Johor

Phone no.: 07-8616783 / 012-7090419 (Sales)

E-mail: info@onelabtesting.com.my

Training scope/testing:

- Fat test
- Moisture content test
- Ash content test
- Protein test



Mini project:

Determination of Sulfide in Water



Personal detail:

Hani Nadhira binti Mohd Hashim 3SSCA

Supervisor details:

Faculty: Prof. Madya Dr. Che Rozid Bin Mamat

Industry: Mr. Chong Zhen Yee



LEE JIA YING
A18SC0089
3SSCA

Introduction ONELAB TESTING SDN. BHD.

Location : 10A, Jalan Tanjong 2, Taman Desa
Cemerlang, 81800 Ulu Tiram, Johor, Malaysia
Contact : 07-861 6783
Email : info@onelabtesting.com.my



Industrial Supervisor
Mr. Chong Zhen Yee
microb@onelabtesting.com.my

Mr. Teh Yu Jie
011-65692722
tehyj@onelabtesting.com.my

Faculty Supervisor
Assoc. Prof. Dr. Che Rozid
Mamat

Company Overview

Onelab Testing is an MS ISO 17025:2017 accredited laboratory.

It provides various analysis such as food, water, microbiological and environmental analysis in diversified industries.

The company is led by a team of experienced IKM registered chemists and MJMM registered microbiologists for all customer analysis request.



Testing available :

Food Testing

- Ready to Eat (RTE) Foods, Frozen Food, Vegetables, Seafood

Water & Wastewater Analysis

- Drinking Water, Distilled Water, Industrial Effluent

Microbiological Analysis

- Total Plate Count
- Yeast & Mold Count
- E.coli



Training Job Scope

- Sample preparation
- Fat test
- Moisture content test
- Ash content test
- Heavy metal test
- Protein test
- Oil and grease test
- pH test
- MPN & TPC
- Streak plate



LEE SHENG HUI
3 SSCA
A18SC0090

Prisma Laboratory (M) Sdn. Bhd.

No. 36-01 & 38-01, Jalan Kempas Indah 1/1, Taman Kempas Indah, 81300 Johor Bahru, Johor.

Tel: +607-556 5050
Fax: +607-556 5060
Email: info@prisma-lab.com.my

Industry Supervisor

Name: Ms. Sauntarya A/P Subramaniam
Position: Assistant Senior Chemist
Tel: +6011-3673 7270
Email: chem-dept@prisma-lab.com.my

Faculty Supervisor

Name: Prof. Dr. Hadi Nur
Tel: +6012-756 4647
Email: hadinur@utm.my



Company Profile

- Established in 2014
- ISO/IEC 17025 certified
- Provide one-stop services in monitoring, testing and other services such as OSH services, environmental management, etc.

Job Scope

- Sample analysis (water) by using standard methods such as APHA methods
- Waste disposal
- Documentation (including SDS and CoA sheets)
- Method extraction for various types of analysis (WFH)
- Project involvement (information gathering and compilation)
- Other tasks



Experience gained

- Enhanced analytical skills and gained experience in various instruments such as pH meter, DO meter, etc.
- Learned various types of analysis through massive reading of standard methods and journals in method extraction
- Proper waste disposal techniques
- Enhanced my knowledge documents, such as SDS and CoA sheets, that we learned from academic.
- Acknowledge my weaknesses, especially my communication skills and carelessness.

Instruments

- HPLC with various detectors*
- GC with various detectors*
- ICP-OES*
- Other analytical instruments such as pH meter.

* Not allowed to operate due to company's policy



its ITS

ITS ENVILAB SDN BHD



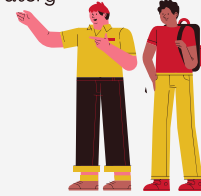
INTRODUCTION

Water and Wastewater Analysis Company provides services such as :-

- Environmental Services
- Lab Services
- Water Purification
- Sludge Management
- Specialty Chemicals and Products
- Engineering Services
- Wastewater Treatment
- Boiler Water Treatment
- Cooling Water Treatment

JOB SCOPE

- Lab Testing
- Marketing
- Data Analysis
- Quality Checking
- Documentation
- Organization of the laboratory



LESSON LEARNED

- Team Work
- Multitasking
- Marketing skills
- Time management
- Confidence in communicating with people
- acquire working ethics exposed to ISO17025

Instruments Used



pH meter
TDS meter
Distillation unit

Type of Parameter Testings



Ammoniacal Nitrogen
Total Dissolved Solids
pH
conductivity



Contact Details

Address:
No. 38-A, Jalan Pingai, Taman Pelangi,
80400 Johor Bahru, Johor

Contact:
07- 3326277

Email:
info@its-envilab.com

SV Name: ChM Voon Van Sin , Manager
(LAB DIVISION)



NISHALNY GOVINATHAN
3SSCA
A18SC0188

DEPARTMENT OF CHEMISTRY UTM
DR NURRULHIDAYAH SALAMUN

INDUSTRIAL TRAINING

VANCE BIOENERGY SDN. BHD.

PLO 668 & PLO 669, Jalan Keluli 5, Kawasan Perindustrian Pasir Gudang, Johor, Pasir Gudang, 81700 Pasir Gudang, Johor

COMPANY BACKGROUND

Vance Bioenergy is a leading ISO 9001 certified producer of fully acid methyl ester (Vance Biodiesel), pharmaceutical-grade refined glycerin (Vance Refined Glycerin) and other chemicals, for use in many industries.

The company is a full member of the Roundtable on Sustainable Palm Oil (RSPO) and a founding Member of the Malaysian Biodiesel Association (MBA).



VANCE CERTIFICATIONS

The company is equipped with ISO 9001, ISO 22000, HACCP, GMP, Kosher and Halal Certifications in order to meet customer's requirement.

VANCE PRODUCTS



More than 95% pure of Vance Refined Glycerin is a colorless, odorless, viscous liquid with a high boiling point.

Vance Refined Glycerin also denatured as controlled and certified Clear Glycerin.



Alternative fuel for diesel engine made from vegetable oil that is trans-esterification process.

Composition:

98.5% + Methyl + Glycerol + Methanol + Glycerin

VANCE FORTRIENOL

Vance Fortrienol (Vitamin E) also produced at VBSB. It is in the form of a clear, rich amber oil mixture, containing full spectrum of naturally occurring tocotrienol and alpha-tocopherol which is extracted from non-GMO

PREPARED BY :

MUR HIDAYAH BINTI TAHANG (A18SG0016)



JABATAN KIMIA MALAYSIA CAWANGAN NEGERI JOHOR



Jabatan Kimia Malaysia

A government department under the Ministry of Science, Technology and Innovation (MOSTI) that provide scientific analysis, investigation, and scientific consultation to government agencies

Job Scope

- Qualitative analysis (determine types of drugs in sample) - GC-MS
- Quantitative analysis (determine amount of drugs in sample)
 - GC-FID/ HPLC
- Colour tests for drugs
- Verification test for apparatus used in lab (repeatability test)

Narcotic Section

Provides services such as analyze seized substances relating to possession and trafficking of dangerous drugs, to investigate of clandestine laboratories and also drug profiling.

Benefits Gained

- Develop and refine skills especially soft skills
- Apply theory learned in class during training (hands on instrument)
- Gain new knowledge and experiences from real work surroundings

Instruments Used



GC-FID



HPLC



GC-MS



RAMAN

Faculty Supervisor :
Dr Mohamad Afiq bin Mohamed Huri

Industry Supervisor :
Puan Norashidah binti Omar
(Head of Narcotic Section)

Prepared by :
Nur Syazwani binti Abdul Hamid (3 SSCA)
A18SC0236



Water Quality Department under Makmal Pusat SAJ Ranhill Sdn Bhd. ensuring and monitoring the quality of water that being distributed to the consumers are complying the guideline from the Ministry of Health (MOH)

Company:
Makmal Pusat,
SAJ Ranhill Sdn Bhd.

Contact:
Lot 4704 Kawasan Perindustrian
Sri Gading, Bt 6, Jalan Kluang,
83300 Batu Pahat, Johor
makmalpusat@ranhill.com.my
+607-4554726

Industry Supervisor:
Chm. Sa'diah binti Ad Ghapur

Faculty Supervisor:
Chm. Dr. Joazizulfazli bint Jamalis

Allowance:
Provided

- Instruments:**
- Autotitrator
 - GCMS
 - DR6000
 - ICPMS
 - DR3900
 - ICMS
 - TDS Meter

Jobscope:

- Analyse water samples for several parameters from 8 districts in Johor. Water sources as follows:
 - Service Reservoir Outlet (SRO)
 - Treatment Plant Outlet (TPO)
 - Reticulation (RETN)
 - Raw Water (RAW)
- Site visit to one of Treatment Plant:
 - Loji Rawatan Air Sri Gading
- Handle Mini Project prepared by industry supervisor
 - Identify the lowest and highest concentrations that can be detected on Autotitrator for Chloride & Hardness parameter
 - Analyse the differences in Fluoride readings for a given period of time



Water samples



Sampling Point: SRO



Sedimentation Tank



Mini Project



Water samples containing Total Coliform

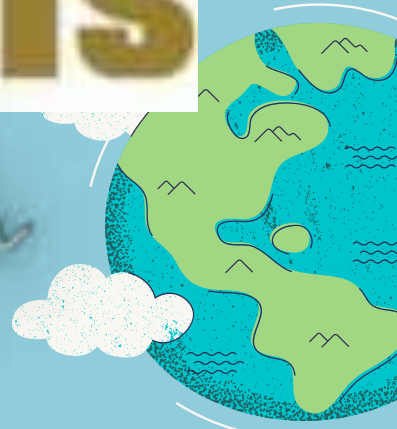


Wearing Self-Contained Breathing Apparatus (SCBA)





Envilab Sdn Bhd



Introduction

ITS Water & Environmental Management Group is a business division under ITS GROUP which offers water treatment chemicals and engineering solutions for seamless applications in water management, water and wastewater treatment and industrial waste pollution control.

Job Scope

- Prepare technical report for client:
 - Isokinetic stack sampling
 - Ambient air monitoring
 - Boundary noise monitoring
- Handling in air samples registration and laboratory works
- Preparation for audit documentation

Products and services

- Environmental Pollution Control
- Ultrapure & Process Water
- Sludge management
- Environmental Services



How to Contact

Address: No. 38- A, Jalan Pingai, Taman Pelangi, 80400 Johor Bahru, Johor
Contact: +60 7 332 6277
Email: info@its-envilab.com

Student's profile

Name: Sarah binti Nizar
Matric number: A18SC0295
Course: SSCA

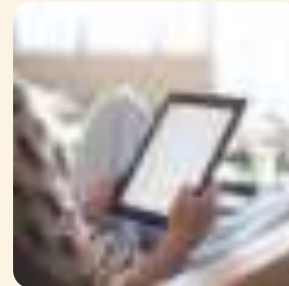
RESEARCH TRAINING REPORT

INDUSTRY SUPERVISOR: PUAN FAEZAH BINTI MOHD OMAR
FACULTY SUPERVISOR: TS. DR. NAJI ARAFAT BIN HAJI MAHAT



COMPANY BACKGROUND

The main function of the DOE is to prevent, eliminate, control pollution and improve the environment, consistent with the purposes of the Environmental Quality Act 1974 and the regulations thereunder.



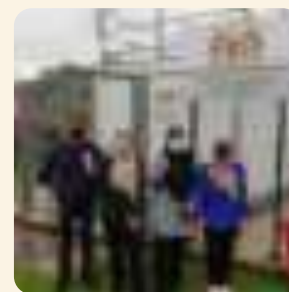
week 1-3 communication and awareness unit

Studied about basic of the roles of DOE in enforcement to protect the environment and contributed to design banner, bunting and brochure for Program Denai Sungai Kebangsaan.



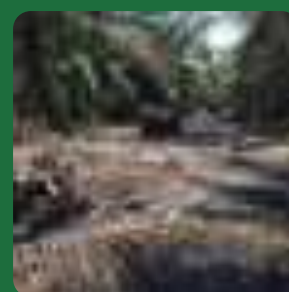
WEEK 4 - 5 POINT SOURCE UNIT

This unit control source of pollution from premises especially by monitoring air emission, effluent and schedule waste I went to inspection and enforcement to premises with officers in charge



week 6 - 7 MONITORING UNIT

Responsible to monitoring activities for river, air, marine and groundwater quality. Had the chance to go to the Air Pollution Index station in Larkin.



WEEK 8 COMPLAINT UNIT

This unit receives complaints from public about any related environmental cases especially open burning. Had the chance to visit complaint site which was a palm plantation



WEEK 9 - 10 Scheduled waste unit

They take part to carry out inspections, monitoring the scheduled waste management. I was exposed to process flow of Palm Oil Mill and its effluent treatment.



week 11-12 EIA unit

Known as Environmental Impact Assessment Unit as a planning tool to prevent and reduce environmental impact arises from development. Had to go on site visit at Pengerang and Senibong Cove.

CONCLUSION

Great experience with new knowledges for 12 weeks of attachment.
Learned about how the organization work as a whole.



Contact us

Tel: +6075565050

Fax: +6075565060

Email: info@prisma-lab.com.my

Website: prisma-Lab.com.my

COMPANY BACKGROUND

Prisma Laboratory (M) Sdn Bhd is an ISO/IEC 17025 accredited laboratory, which was established in Johor Bahru, in 2014. It is also the headquarter (HQ) in Malaysia, with two branches in Shah Alam, Selangor and Miri, Sarawak, respectively.

Prisma Laboratory provides a wide range of laboratory testing and consultancy services to a variety of clients including the petrochemicals, oilfields, pharmaceuticals, chemicals, foods, electronics, cosmetics, mining etc.

*Testing for today,
Empowering for tomorrow.*

**Faculty Supervisor:
Prof. Dr. Hadi Nur**

**Organization Supervisor:
Ms. Sauntarya Subramaniam**

INSTRUMENTS

HPLC-PDA



UV-VIS
SPECTROPHOTOMETER



ICP-OES



Prisma
Laboratory
(M) Sdn Bhd

EXPERT IN ANALYTICAL
LABORATORY
SOLUTIONS & EHS
MONITORING SERVICES

TRAINING SCOPE

- Chicken Poultry System Project
- Laboratory analysis
- Method extraction
- Documentation
- Waste management
- Laboratory cleaning
- Assisting other staffs

VALUABLE EXPERIENCE

- Enhance my communication skills
- Familiar with the daily routine of testing lab
- Practical experiences
- Laboratory Safety
- Technique of method extraction

TAM YI QIAN
3/SSCA

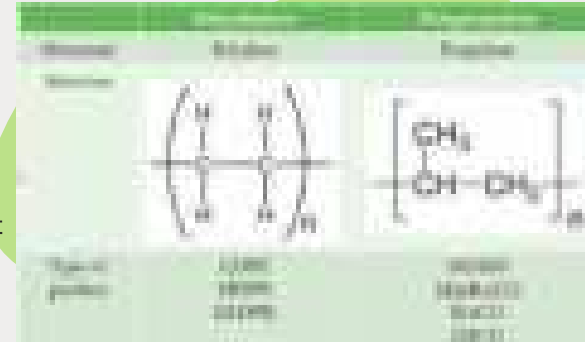


It's all about the Industrial Training

Get student prepared before enter industry sector. My industrial training was at PL1.



- Lotte Chemical Titan (M) establish in 1991.
- 2 manufacturing site, which at Pasir Gudang (PL1& ML) and Tanjung Langsat(PL2).
- Proud to as Malaysia's standalone producer of polyolefin and one of the Southeast Asia's largest integrated producers of olefins and polyolefins
- LCTM consist of 12 plants, 2 co-generation plants and 3 tank farms.



Quality Management Department

- Consist of 3 Lab: PL1, PL2 &ML
- QC & QA are the main focus as quality is QM product.
- As a certified ISO9001 company, LCTM product is internationally and globally recognized.
- Reason of customer to trust LCTM.
- Detail and proper investigate is carried out whenever there is product customer complaint.



SAFETY PPE



Interview with supervisors



Picture with my colleagues



Conclusion

LCTM have reach my expectation especially in quality management system. I have also learned the theory of polymer, hand on some instrument and understand how chemist work in industrial area.



INTERNSHIP INFORGRAPHIC VANCE BIOENERGY SDN. BHD.



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



VANCE
BIOENERGY

RESEARCH AND DEVELOPMENT

PERSONAL DETAILS

Name: Azib Aiman Bin Abdul Halim
Matric: number: A18SC0030
SV Faculty: Chm. Dr. Susilawati Binti Toemen
SV Company: Mrs. Farhana Binti Ibrahim

WASTEWATER TREATMENT

- High temp sump
- thermophilic bio tower
- Aerobic
- Clarification
- watercourse discharge final discharge

Wastewater Parameter Testing

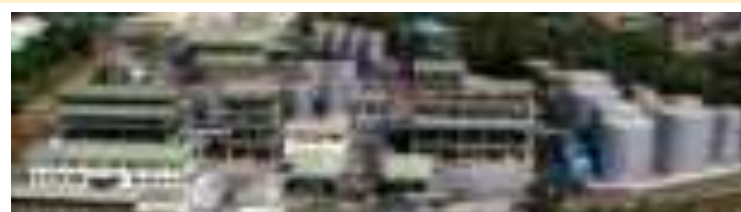
- Chemical Oxygen Demand (COD)
- Dissolved Oxygen (DO)
- Suspended Volume: 30 Minutes (SV30)
- Total Suspended Solid (TSS) and pH

Certifications

- ISO 9001, ISO 22000
- Good Manufacturing Practices (GMP)
- Hazard Analysis Critical Control Point (HACCP)
- Halal
- Kosher Certifications

COMPANY DETAILS

- A certified producer of fatty acid methyl ester, pharmaceutical-grade refined glycerine, and other oleochemicals for use in many industries
- Vance Bioenergy is a socially and environmentally responsible company and has been an active member of the Roundtable on Sustainable Palm Oil (RSPO) since 2006



GENERAL PRODUCTION

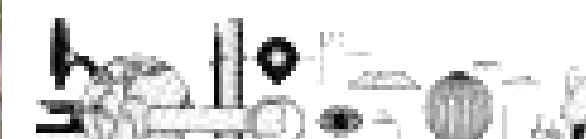
- Vance Biodiesel
- Vance Refined Glycerin
- Vance Surfactants
- Vance Fortrienol

DEPARTMENT

- Human Resources and Administration (HRAD)
- Quality Assurance and Quality Control (QA, QC)
- Plant, Production and Operator
- Safety & Health
- Logistic & Shipping
- Maintenance & Project

QUALITY CONTROL DEPARTMENT

- Perkin Elmer Gas Chromatography for testing
- GC-A, GC-B and Gas Chromatography with Headspace Sampler
- KG Coulometric and KF Volumetric for determination of water content
- Hydranal Coulomate AG as the titration solvent



BIO SYNERGY LABORATORIES SDN BHD



ELAINE KONG MAN YI

A18 SC0044

SSCC

HEAVY METAL DEPARTMENT

SUPERVISOR:

MS CHOO XIN JIA [INDUSTRY]

PROF. MADYA DR. ROSWANIRA
ABDUL WAHAB [FACULTY]

KNOWLEDGE GAINED

- WET DIGESTION
- SAMPLE PREPARATION FOR BENZOCAINE ASSAY OF CONDOM SAMPLE
- TESTING OF HEAVY METAL IN FOOD, WATER AND PHARMACEUTICAL SAMPLE
- TESTING OF PRESERVATIVES WITH HPLC



ADDRESS: No. 7, JALAN MUTIARA
EMAS 6/1A, TAMAN MOUNT
AUSTIN, 81100 JOHOR BAHRU,
JOHOR.

CONTACT: 07-3595353



JOB SCOPE

- SAMPLE PREPARATION

- ASSISTS INSTRUMENT
OPERATION

- GFAAS
- FIMS
- ICP-OES
- HPLC

About Me

FAIZAH IZZATI BINTI MOHD SUDIN
A18SC0047
3-SSCC
f.izzati@graduate.utm.my



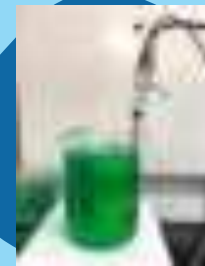
ZONE 12, PLO 553, JALAN KELULI 8,
KAWASAN PERINDUSTRIAN PASIR
GUDANG, 81700 PASIR GUDANG, JOHOR



UYEMURA (M) SDN. BHD.



Uyemura (Malaysia) Sdn. Bhd. is a subsidiary of C.Uyemura & Co., Ltd. a Japanese MNC specializes in electro and electroless plating chemicals and treatment chemicals. Uyemura well known and established as a specialist plating experts and trusted with high quality products.



JOB/TRAINING SCOPE

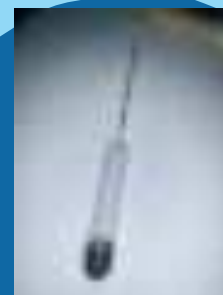
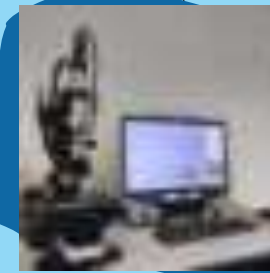
- Mini Project:
Development of Lead-free
Electroless Ni-P plating bath
for High Thickness Plating



- Calibration of pH meter
The pH meter will be calibrated
at least once every day to
ensure the accuracy and proper
function of the pH meter

INSTRUMENTATION

- Digital Microscope
To check gas pits occur on the
substrate used for plating



- Hydrometer
Used to analyze the specific
gravity (density) of the solution
of plating bath

BENEFITS GAINED

- Get to work with professional mentors
- Improving my hands-on laboratory skills
- Learnt deeper about Electroless Nickel Plating
- Giving me opportunity to put into practice what I have learnt at the university

REFERENCES

UYEMURA (M) SDN. BHD.

☎ 07-251 1566

✉ jt-wong@uyemura.co.jp



About me

Fariha Maryam binti
Muhammad Faisal
355CC



Hokuden (M) Sdn. Bhd.

Hokuden (M) is one of the companies in this country that produces Printed Circuit Board (PCB). It is a major provider to the electronic industry, with clients and suppliers including audiovisual, automotive audio, power tools telecommunications, and other high-tech companies.



PTB III, 244, 250, Jln Tun
Matalib 3, Kawasan
Perindustrian, 81440 Bandar
Tenggara, Johor



07-896 3200

Job Scope

- Assigned to Wastewater Treatment Plant (WTP) Department and conduct WTP process.
- Managing scheduled waste
- Carried out COD and copper test for water sample

Experience

- Working in a corporation
- Learnt to organize all allocated jobs in a systematic manner
- Get to understand the process of WTP thoroughly
- Hands on operating skills

Instrumentation



COD Cell Test



Photometer and Tablet
Reagent for Copper Test

ENVILAB SDN BHD

INTRODUCTION



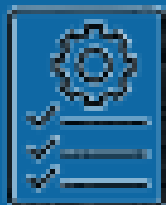
Envilab Sdn Bhd is a Malaysia wastewater treatment and lab analysis equipment company offering applications in wastewater treatment and waste pollution control.

ABOUT COMPANY



Envilab Sdn Bhd
38, Jln Pingai, Tmn Pelangi,
80400, Johor Bahru
+607-332 6277
jbe@itsenvilab.com

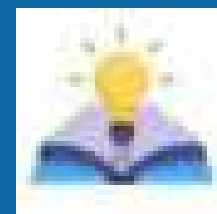
JOB SCOPE



- Reporting (Logbook, Checking Report)
- Documentation (Parameter List, Audit, Invoice & Delivery Order, Telefax)
- Prepare Solution
- Sound Data Transfer & Separation

WHAT I LEARNT?

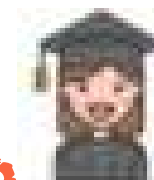
- Communication
- Team Working
- Multitasking
- Time Management



SUPERVISORS

Faculty Supervisor:
Dr. Nurulhidayah Salamun

Industrial Supervisor:
Ms. Chloe Cheah Mun Wei
Senior Environmental Engineer
016- 907 2121




Personal Information

GRACE WONG PEI YEE
A18SC0063
INDUSTRIAL CHEMISTRY (3 SSCC)


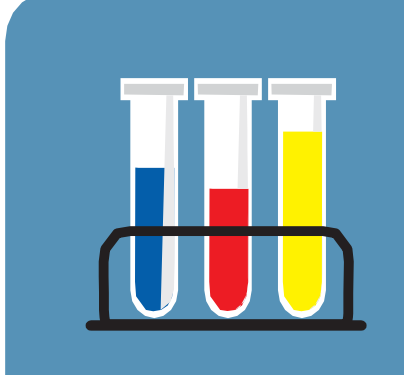


Pathology & Clinical Laboratory (M) Sdn. Bhd.





About Company

- Pathlab medical laboratory organization was founded in Singapore in 1952 and 1974 in Malaysia.
- Excellence in healthcare, pathology, and clinical laboratory



Job Scope

- Blood test
- Urine test
- Syphilis test
- Blood group test
- Quality control of hematology analyzer and blood test
- Routine cleaning of hematology analyzer

Things Learned

- Enhanced communication skill
- Developed time management skill
- Importance of quality control
- Good laboratory practices

Company Details

130, Jalan Meriam,
84000, Muar, Johor,
Malaysia

+606-951 1377
<https://www.pathlab.com.my/>

Supervisor Details

Faculty Supervisor:
Dr Juan Bin Matmin
Dr Mohamad Hamdi Bin
Zainal Abidin

Industrial Supervisor:
Mr. Leo Teng Chai



Personal Information



Heng Aie Yin
3 SSCC

Instruments Used
Sysmex
Hematology Analyzer



Centrifuge Machine

Micropipettes





UTM

UNIVERSITI TEKNOLOGI MALAYSIA

Journey of Internship



Lee Hin Wei 3SSCC
A18SC0088

Introduction of Vance Bioenergy

- Fast-growing oleochemical manufacturer located at Pasir Gudang, Johor.
- A full member of the RSPO and a founding member of the MBA.
- Equipped with ISO 9001, Halal certificate, GMP certificate, Kosher certificate, etc to meet the quality of the products.

Product Produced



Vance Surfactant



Vance Refined Glycerine



Vance Biodiesel



Research Project

Title: A Review on Palm Oil Biodiesel: Engine Performance, Engine Emission, Challenges, and Implementation of B100 in Automotive Industry

Objective: To compare the outcome for different blends of palm biodiesel and the challenges to implementing palm oil biodiesel in the automotive industry from the previous research.

Things Learned

Improving Soft Skill

Problem Solving

Better Time Management

Industrial Supervisor
Mrs. Farhana binti Ibrahim
QC & Lab Manager
Vance Bioenergu Sdn. Bhd.

Faculty Supervisor
Dr. Susilawati binti Teomen
Department of Chemistry
Unversiti Teknologi Malaysia



UYEMURA INDUSTRIAL TRAINING

About Uyemura

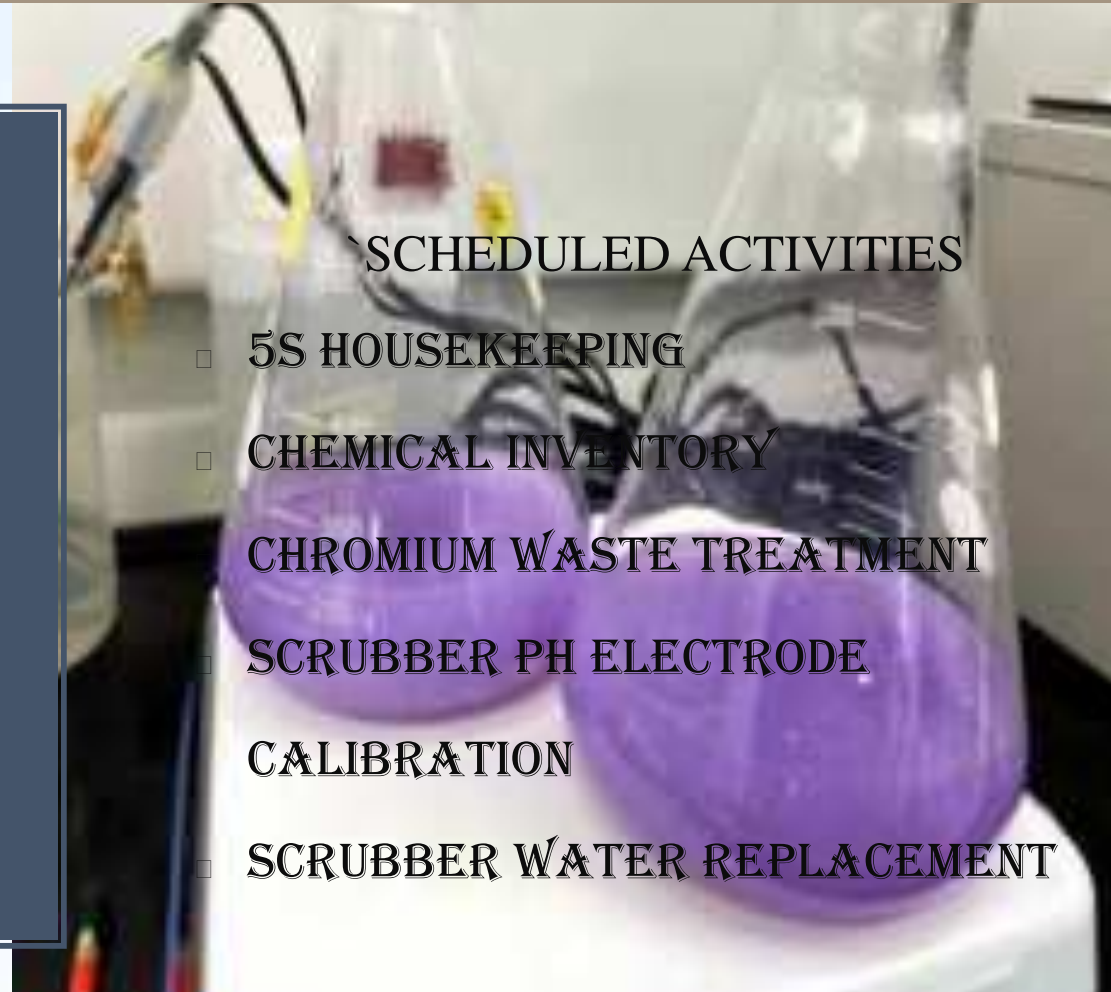
- JAPANESE MNC
- SPECIALIZES IN ELECTRO AND ELECTROLESS PLATING CHEMICALS AND TREATMENT CHEMICALS
- SPECIALIZING IN DEVELOP AND MANUFACTURE PRODUCT RANGE OF PLASTIC AND METALS SURFACE TREATMENT

INTERN ACTIVITIES

- PH METER CALIBRATION
- INTRODUCTION TO ELECTROLESS NICKEL PLATING AND ITS ANALYSIS METHOD
- CHROMIUM SAMPLE ANALYSIS
- WATTS BATH COMPONENTS' CONCENTRATION ANALYSIS
- HULL CELL TEST
- MINI PROJECT

SCHEDULED ACTIVITIES

- 5S HOUSEKEEPING
- CHEMICAL INVENTORY
- CHROMIUM WASTE TREATMENT
- SCRUBBER PH ELECTRODE CALIBRATION
- SCRUBBER WATER REPLACEMENT



Special about R&D department

- FRIENDLY WORKING ENVIRONMENT
- VALUABLE EXPERIENCE SHARING
- CHANCE TO HANDLE CUSTOMERS' SAMPLE ANALYSIS
- VARIOUS TYPE OF INSTRUMENTATION

INSTRUMENTATION

- Flame atomic absorption spectrometer
- UV-Vis spectrometer
- pH meter
- Sulphameter set
- Digital microscope
- Grinder and polisher



COMPANY BACKGROUND

Envilab SDN BHD is a part of the ITS group as one stop environmental consultancy with capabilities in water and air pollution testing and control supported by an internal ISO/IEC 17025 accredited laboratory. ITS Water & Environmental Management Group is a business division under ITS GROUP which offers water treatment chemicals and engineering solutions for seamless applications in water management, water and wastewater treatment and industrial waste pollution control

ENVILABSDNBHD

ADDRESS

38-A, Jalan Pingai, Taman Pelangi,
80400 Johor Bahru, Johor
Tel: +603 5740 9888
Fax: +603 5740 9868
Email : info@its-envilab.com

ABOUT ME

Name: Muhammad Faiz Bin Abd Halim
Course :Bachelor Of Science (Industrial Chemistry)
Matric No : A18SC0121

JOB SCOPE

- Bod analysis
- PH and TDS analysis
- Turbidity, Conductivity
- Oil and Grease
- Understanding of APHA and DOE method



pH and TDS meter



DO meter and stirrer for Bod reading



AAS

CONTACT

Ms Voon Wan Sin
011-21793950
Email : wsvoon@its-envilab.com

THINGS LEARNED

- Hands-on practice on analysis
- Communication skills with other staff and superior
- Able to enhance laboratory work skills
- Learn on environmental analysis
- Get to know environmental related company



Incubator to placed Bod sample (3days)



UV- VIS instrument



JABATAN KIMIA MALAYSIA



(Johor Branch) Toxicology Section

The Toxicology Division provides analytical services for the detection of "poisons" in medical-legal cases, clinical toxicology, and pharmaceutical drug control.

The toxicological analysis covers the following areas:

- Alcohol analysis in blood, urine and vitreous humor.
- Human poisoning.
- Animal poisoning.
- Heavy metal poisoning.
- Drugs in body fluids.
- Scheduled poisons



GC-FID



GC-MS



LC-MSMS



HPLC

INSTRUMENTS
USED

TRAINING MODULE

Detection of Common Poisons (Acid Drugs)

Analysis of Ethyl Alcohol (Quantification)

Detection of Schedule Poisons in Pharmaceutical

Detection of Basic Drugs

Confirmatory test for ATS (MDMA, Ketamine, Amphetamine and Methamphetamine)

Confirmatory test for Opiates (Codeine, 6-MAM and Morphine)

Confirmatory tests for Cannabis (Quantitation)

ELISA Screening test (Opiates, ATS, Cannabis and Benzodiazepines)

Detection of Organophosphorus and Organochlorine

EXPERIENCE

- ELISA Training
- Proficiency Test

THINGS LEARNED

- New experiences
- Improve soft skills
- Able to hands on using instruments
- Gain new knowledge

CONTACT INFO

Tel: 07-2226569 / 07-2268366 / 07-2276366

Fax: 07-2238366 / 07-2225366

Email: projkm@kimia.gov.my

Website: www.kimia.gov.my

Faculty Supervisor: Dr. Mohamad Afiq bin Mohamed Huri

Industrial Supervisor: Dr. Mohamad Raizul bin Zinalibdin



PREPARED BY

MUHAMMAD HAFIZZUDDIN BIN MARWAN (35500)
A18SC0136

GP Batteries Malaysia (GPBM) is established by Gold Peak Group since 1964. The first branch was built in Hong Kong and now it was connected and expand worldwide. For GP Batteries in Malaysia, all 3 factories are located in Johor that is in Senai, Tampoi and Tebrau. This company produced AA, AAA, Somfy and FICOSA battery for home and industrial purposes and constantly improving their capabilities, products and services.



Supervisor:

FACULTY: DR NURSYAFREENA
BINTI ATTAN
INDUSTRY: MR. TAY THIAN
KEAT/ MS. SIEW BEI FEN

Job scopes:

- Daily inspection on dented batteries in production
- Failure analysis for scrap batteries
- Improving visual aid for operator in battery quality
- Work instruction improvemnet

Experience:

- Quality assurance on battery quality
- Quality assurance on outcoming batteries process
- Failure analysis

LOCATION: NO. 17 & 17A,
JALAN FIRMA 2, KAWASAN
PERINDUSTIRIAN TEBRAU 1,
81100, JOHOR BAHRU JOHOR

NO.TEL: 07-330 0033

STUDENT NAME: MUHAMMAD IKHMAL FIRDAUS BIN MOHD RAZAPI (3SSCC)

GP



- GP Batteries was established by Gold Peak Group in 1964 at Hong Kong.
- It has manufacturing sites in China, Vietnam, and Malaysia, as well as marketing and trading offices throughout Asia, Europe, and North America.
- This company has three manufacturing plants in Malaysia, which are located in the Tampoi, Senai, and Tebrau
- At Senai and Tampoi produce 9V Alkaline Batteries
- Tebrau produce AA, AAA, Somfy, and FICOSA batteries.

SUPERVISOR:

DR NURSYAFREENA BINTI ATTAN (UTM)

MR SYED ZAHABUDIN BIN KUNJIMMAIDO (GP BATTERIES)

STUDENT:

MUHAMMAD SHAFUAN BIN RUDZLAN APANDI (3 SSCC)



JOB DESCRIPTION

- Learned about 9V battery manufacturing process including their raw materials.
- Learned about quality control plan of the company for incoming quality control and in-process quality control.
- Learned about the Effluent Industrial Treatment System for wastewater



Learning Outcome

- Quality Assurance on process manufacturing batteries
- Industrial Effluent Treatment System
- Analysis on defect batteries



UTM

UNIVERSITI TEKNOLOGI MALAYSIA

OBJECTIVE

1. Able to apply academic knowledge from university to real-life job.
2. Exposing to a working environment while gaining experience in a company.
3. Utilise all of the information and abilities gained through professional experiences in the university study process

PRODUCTS





INDUSTRIAL TRAINING BIO SYNERGY LABORATORIES SDN. BHD. (Subsidiary DXN Holding Bhd)



INTRODUCTION:

- Bio Synergy Laboratories Sdn Bhd was a subsidiary company under the DXN Holding Berhad.
- It had a 16 years of experiences in laboratory testing.
- Synergy Laboratories Sdn Bhd have four branches all around malaysia with its HQ located at Kedah, Northern Region Laboratory located at Penang, Central Region Laboratory at Selangor and Southern Region Laboratory located at Johor.

JOB SCOPE:

- Analysis most of parameter in water samples. The parameter including fluoride, sulphide, free chlorine, nitrite, nitrate and many more.
- Distillation of samples for analyzing the ammoniacal nitrogen and total nitrogen in water samples.
- Extraction of oil and grease from water samples by using liquid-liquid extraction method

INSTRUMENTS USED:

1. HACH DR6000 Spectrophotometer
2. DRB200 COD Digestor
3. FOSS Kjeltac 2100 Distillation Unit
4. Gerhardt Kjeldatherm Digestion Unit.
5. HANNA Instrument Turbidity Meter



MY PROFILE:

Name: Noor Syifaa Arina Binti Afandi
Matric No: A18SC0172
Course: Industrial Chemistry (SSCC)
Industry Supervisor: ChM Nurul Shafika Ahmad Ihsan
Faculty Supervisor: PM Dr. Roswanira Abdul Wahab

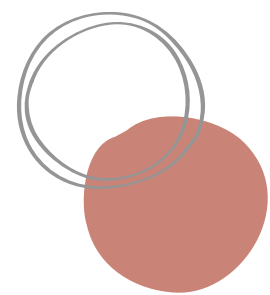
COMPANY PROFILE:

Office Number: 07-3518666
Fax Number : 07-3595353
Email : hckhoo@biosynergy.com.my

Address : Southern Region
Laboratory, No. 7, Jalan Mutiara Emas 6/1A, Taman Mount Austin, 81100 Johor Bahru, Johor

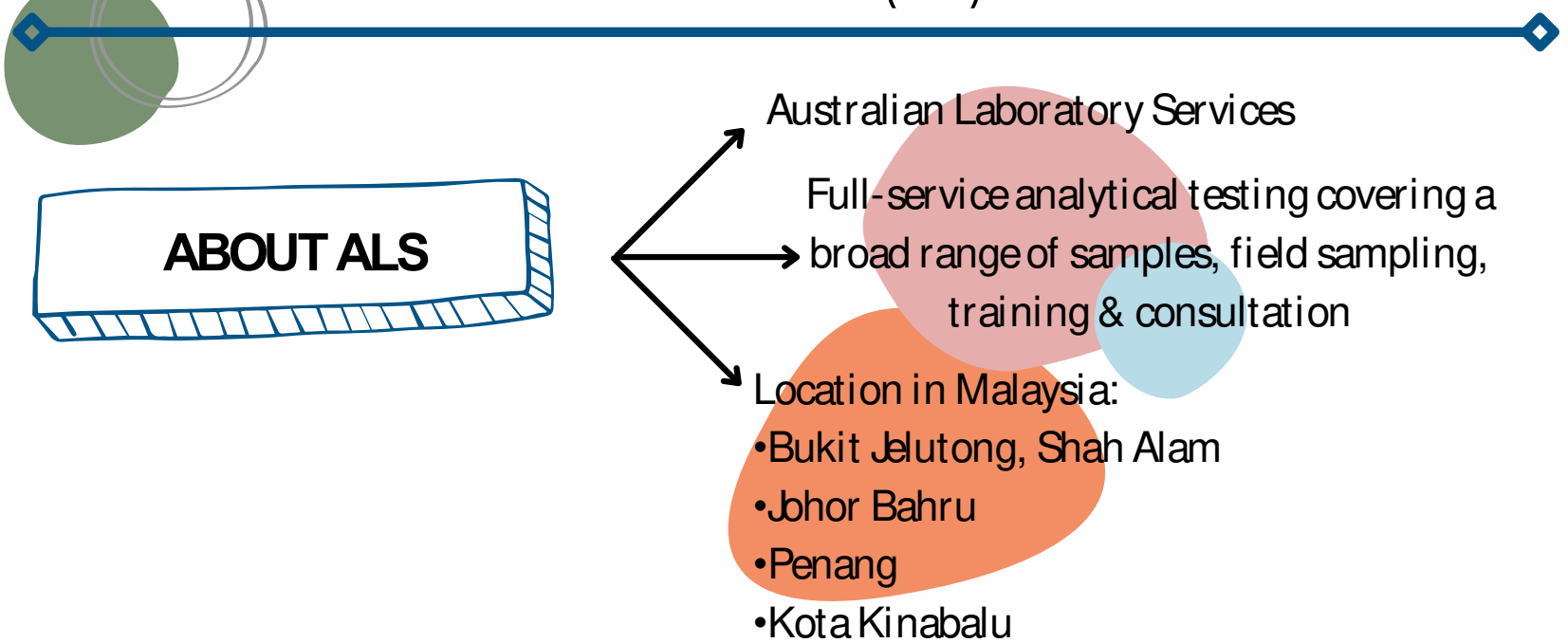
Website :
<https://www.biosynergy.com.my>

Facebook : Bio Synergy Laboratories Sdn Bhd



INDUSTRIAL TRAINING

ENVIRONMENTAL (INORGANIC) DEPARTMENT
ALS TECHNICHEM (M) SDN BHD



JOB SCOPE

- Do Environmental Health Testing
- Prepare sample biofluids for analysis
- Do instrument analysis for certain biofluids testing

- Heavy metal in urine
- Mercury in urine
- 2,5hexanedione in urine
- SPMA, MHA & HA in urine
- Creatinine in urine



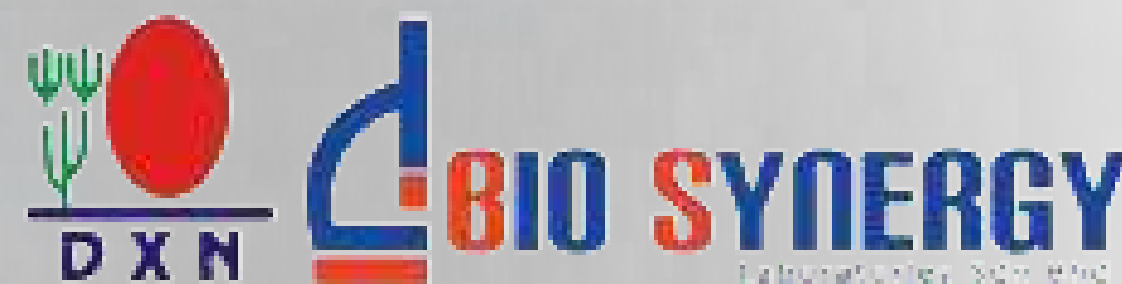
- Heavy metal in blood/hair
- Mercury in blood/hair
- Cholinesterase analysis in serum and plasma sample



NURIZZATY BINTI MOHD FUAD
A18SC0221



INDUSTRIAL TRAINING BIO SYNERGY LABORATORIES SDN BHD (Subsidiary DXN Group)



INTRODUCTION

- Bio Synergy Laboratories Sdn Bhd is a laboratories under the DXN Group.
- Bio Synergy Laboratories also has 4 branches around Malaysia. The first branch which is the HQ is located in Kedah, the northern region lab in Penang, central region lab in Kuala Lumpur and southern region lab in Johor Bahru.
- Bio Synergy is a laboratories that has been accredited with MS ISO/IEC 17025 by the Department of Standard Malaysia.
- Bio Synergy is also the commercial laboratories that been recognized by Food Safety and Quality Division, Minister of Health to perform tests for Health Certificate application.

JOB SCOPE

- Heavy metal analysis such as mercury, cadmium, lead, antimony, nickel, arsenic and many more on commercial sample product and water sample.
- Preservative testing (benzoic acid and sorbic acid) on food sample.
- Benzocaine present testing on medicated condom sample and topical anaesthetic gels sample.
- Sulfur and silicon testing on oil sample.

ABOUT ME

Name: Nur Nazira Nabila Binti Amiszan
Matric No : A18SC227
Course: Industrial Chemistry (3SSCC)
Supervisor:-
Faculty: Prof. Madya Dr. Roswanira Abdul Wahab
Industry: Miss Choo Xin Jia

INSTRUMENTS



GF-AAS



HPLC



FIMS



ICP-OES

ADDRESS

Bio Synergy Laboratories Sdn Bhd
 No 7, Jalan Mutiara Emas 6/1a, Taman Mount Austin, 81100, Johor Bahru.
Tel No: 07-3518666
Fax: 07-3595353
Contact:
Name: Miss Choo Xin Jia
Email: labchemical.jb@biosynergy.com.my





GP Batteries (M) is established under Gold Peak Group in Hong Kong. GP Batteries has rapidly expanded to become one of the world's major suppliers of primary and rechargeable batteries. now it expand worldwide and have 3 company in johor that was in Senai, Tampoi and Tebrau. this company produce AA, AAA, SOMFY and FICOSA battery for home and industrial purpose by always doing improvement from time to time about their capability, servis and products.



INSTRUMENT USED:

- Video measurement system(VMS) machine
- Battery X-ray machine
- Sealing test machine
- Vent test machine

EXPERIENCE

- Quality assurance on battery quality
- quality control for P30 process
- Failure Analysis



SUPERVISOR

INDUSTRIAL: MR TAN KHOON WEI

FACULTY: DR NURSYAFREENA ATTAN

JOB SCOPE

- Daily inspection for reject item in production line(P30)
- Reduce the number of scrap
- improve the quality of battery that produce

LOCATION

NO. 17 & 17A, JALAN FIRMA 2, KAWASAN PERINDUSTRIAN TEBRAU 81100 JOHOR BAHRU, JOHOR

NO TEL: 07-330 0033

STUDENT NAME: NUR SYAZA AQILAH ABDULLAH SUHAIMI

Nuramira Binti Mohd Yusuf
A18SC0242
3 SSCC

INTERNSHIP INFOGRAPHIC

PRISMA LABORATORY (M) SDN BHD

Jalan Kempas Indah 1/1, Taman Kempas Indah, 81300 Johor Bahru, Johor



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



DAILY TASK

- Method extraction (WFH)
- Documentation
- pH
- Turbidity
- Total Suspended Solid
- Color
- Fluoride
- Nitrate

COMPANY PROFILE

- Established in Johor Bahru, in 2014
- ISO/IEC 17025 Accredited Laboratory
- Conducted > 1000 analytical laboratory test

THINGS LEARNED

- Share knowledge to industry while gain experience there
- Communicate efficiently with others to solve problems
- The correct way to handle instruments

PRICELESS EXPERIENCE

- I was given the opportunity to handle instruments by myself
- Build a good relationship with the staff
- Able to gain more knowledge from the chemist



Phosphorus test



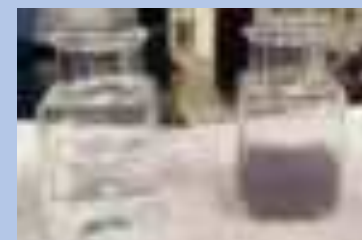
Nitrate test



Fluoride test



TSS test



Color test

INSTRUMENTATION



UV-Vis Spectrometry



pH meter



ICP-OES



Vacuum Filtration Set

PRISMA LABORATORY (M) SDN BHD

PREPARED BY:
NURHAFIFAH ADI BINTI ASPIHEN (3SSCC)
A18SC0247

COMPANY PROFILE

No. 36-01 & 38-01, Jalan Kempas Indah
1/1, Taman Kempas Indah, 81300
Johor Bahru, Johor Darul Takzim.
Tel: +607 5565050
Fax: +607 5565060

- Established in Johor Bahru, 2014
- ISO/IEC 17025 Accredited Laboratory
- Conducted more than 1000 analytical laboratory tests.

SERVICES

- FOOD TESTING
- CHEMICAL TESTING
- MICROBIOLOGICAL TESTING

SAMPLES:

- WATER
- FOOD
- BLOOD
- URINE
- SOIL
- CHEMICALS

Prisma Laboratory offer a comprehensive range of laboratory testing and consulting services to a variety of clients in Johor and beyond, including the Petrochemicals, Oilfields, Pharmaceuticals, Chemicals, Foods, Electronics, Cosmetics, and Mining etc industries.

Daily Task:



Work From Home

- Method Extraction



Work From Office

- Probe Analysis (pH, Temperature, Salinity, Conductivity, Turbidity, Dissolved Oxygen)
- UV-Vis Analysis (Colour, Fluoride, Phosphate)
- Documentation
- Waste Disposal

AVAILABLE INSTRUMENTS:

- HPLC-PDA
- ICP-OES
- GC-MS
- UV-VIS
- GC-FID

THINGS LEARNT:

- PROFESSIONALISM
- TEAMWORK
- COMMUNICATION SKILLS
- CRITICAL THINKING
- PROBLEM SOLVING



Turbidity Meter

DO Meter

pH Meter

Conductivity Meter

UV-VIS



Prisma Lab's staffs with us.



INDUSTRIAL TRAINING

SSCU 3905

SHORT SEMESTER SESSION 2020/2021



VANCE BIOENERGY SDN BHD

PLO 668 & PLO 669, JALAN KELULI 5, KAWASAN PERINDUSTRIAN
PASIR GUDANG, 81700 PASIRGUDANG, JOHOR

A leading ISO 9001 certified producer of fatty acid methyl ester, pharmaceutical-grade refined glycerine and other oleochemicals for use in many industries with a mission to do the best to fulfil the customers' needs and constantly improve capabilities, products and services.

Products:

- Vance Biodiesel
- Vance Refined Glycerine
- Vance surfactants



EXPERIENCES:

- Analysis of raw materials:
 - Free fatty acid (FFA) content
 - Moisture content
 - Iodine value (IV)
 - Mineral oil content
- Analysis of chloroacetic acids in surfactants by HPLC method
- Review on Surfactant: Cocamidopropyl Betaine: Recipe, Production Process and its Intended Use

PROJECT:

Study on Activated Sludge Settleability and The Removal Rate of COD and Color in Biodiesel Fuel Wastewater



INDUSTRIAL SUPERVISOR:

MRS. FARHANA BINTI IBRAHIM
QC & LAB MANAGER
VANCE BIOENERGY SDN BHD

FACULTY SUPERVISOR:

CHM. DR. SUSILAWATI BINTI TOEMEN
DEPARTMENT OF CHEMISTRY
UNIVERSITI TEKNOLOGI MALAYSIA

PREPARED BY:

SITI NAJIHAH BINTI RAZALUDIN
3SSCC
A18SC0309



Industrial Training Bio Synergy Laboratories Sdn Bhd



Personal Profile

Name : Siti Noradliza Bt Mohd Shafar
Matric No. : A18SC0313
Course : Science in Industrial Chemistry (SSCC)
Faculty Supervisor : PM Dr Roswanira Abdul Wahab
Industry Supervisor : ChM Amni Bari'ah Binti Mat Shah

Company Profile

Address : Southern Region Laboratory, No 7, Jalan Mutiara Emas 6/1A, Taman Mount Austin, 81100, Johor Bahru, Johor

Office Number : 07-3518666
Fax Number : 07-3595353
Email : hckhoo@biosynergy.com.my
Website : <https://www.biosynergy.com.my>

Job Scope

Weekly calibration of glassware which include measuring cylinders and volumetric flasks of different weights and volume

Analysis of parameters in Oil and Petroleum Products including oxidation stability, vapour pressure, product density, flash point, oil particle count, total base number and total acid number.

Company Introduction

Bio Synergy Laboratories Sdn Bhd is a subsidiary company under DXN Holdings Bhd

It has over 16 years in laboratory testing and has been accredited with MS ISO/EIC 17025 by Department of Standard Malaysia.

This subsidiary company has four branches in Peninsular Malaysia located in Penang, Johor, Selangor and Kedah.

Instruments Used

1. HK-0193 Oxidation Stability Bath (RPVOT) ASTM D2272
2. FDT-1505 Petroleum Products Density Tester
3. HK-8017 Reid Vapour Pressure Bath ASTM D323
4. HK-261A Manual Pensky Martens Closed Cup Flash Point Apparatus ASTM D93
5. L02A Oil Liquid Particle Counter
6. FDH-0173 Automatic Lubricant Oil Oxidation Stability Tester (RPVOT)
7. GT-200 Automatic Titrator, GT-200BRT Automatic Buret and GT-200STR Stirrer



Introduction

- Training in quality department and involved a lot in QA of raw material team.
- Sternmaid Asia Pacific sdn bhd is the newest manufacturing plant in the Stern-Wywiol Gruppe, with its headquarters in Hamburg. It was a blending facility and logistics hub.
- Accredited under Food Safety System Certification 22000 (FSSC 22000), GMP and MS 1480 HACCP.
- Focus on developing and producing highly-customized functional systems for food under strict Halal requirements for example flour improver, micronutrient premix, baking ingredients, baking premix, bread improver and stabilizer

Documentation task

- Register the new application for products and its raw material in Halal system
- Double check the incoming raw material report before being endorsed
- Sorting out the incoming raw material report and the non-conforming material during incoming process report in the file by following the date of issue
- Filling out the information of the new item card by referring the product's specification and its safety data sheet

Mini project

1) Halal research

- Finding out the information on Halal regulation of MUI (Indonesia) and MUIS (Singapore)
- Differentiate the regulation of MUI, MUIS and JAKIM
- This task encourages me to reach out to the organization formally for the information that not stated in the internet and also discussing with them to solve my objective of this research.

2) Color issue

- Comparing the raw material sample that have a color issue which previously causing the different color of the finished goods.
- The color was compile and put in the accepted range from light to dark
- This range will become the references for the new incoming raw material that having color issue.

Simple task

- Receiving sample of finished good from production and conduct the homogeneity test
- Taking sample of the new incoming raw material by following the strict procedure and print the inspection report
- Making a GMP inspection by collecting findings and compiling it in the report.



Tools for sampling



GMP Findings



Hands-on Testing

1) Homogeneity test

- To ensure that the sample does not have any issue by comparing it with the previous batch
- One of the example is visual checking

2) Sieving test

- To measure the particle size distribution of the sample using vibrator analyzer
- Following the specification by the supplier to ensure that there is no issue with the sample

3) Loss on drying test

- To measure the moisture of the sample
- Following the specification that given to ensure that the sample is in good condition

4) Bulk density test

- To check the flowability of the sample
- The result must follow the specification
- To ensure that there is no issue during packaging



Visual inspection



Sieving test



Loss on drying test



Bulk density test

MY CO2 Lab

TAN GEE HARN
A18SC0329
MY CO2 PG SDN BHD
12/7/2021-1/10/2021



- Start on 2006
- A home-grown and award-winning independent laboratory
- 3 branches (Penang, Selangor, Johor)

Analytical testing:

-air pollutants, feed, health care, industry products, iron ore, noise, oil, radiation, toys, water

Other services:

Industrial hygiene assessment and environmental monitoring services

JOB SCOPE

- Metal Department
- ICP-OES & ICP-MS
- Sample Preparation (open digestion, microwave digestion, oil extraction)
- Residue on ignition, sulphated ash, chromium hexavalent, uniformity of weight, total carbon dioxide test



- Water Department
- pH meter, TDS meter, Titration
- pH test, total dissolved solid test, total hardness test





TAN XIN LIN

3SSCC

A18SC0332

Faculty Supervisor

Assoc. Prof. Dr. See Hong Heng

Industrial Supervisor

Ms. Saidatul Huda Hamzah

QUANTITATIVE TEST METHOD

- Assay of Benzocaine in Gel
- Determination of Nonoxynol-9 in Silicone Based Lubricants

Field of Training

QUALITATIVE TEST METHOD

- NDMA & NDEA Impurities Test

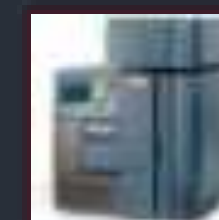
METHOD DEVELOPMENT & VALIDATION

- Assay Of Benzalkonium Chloride

Instrumentation



GC



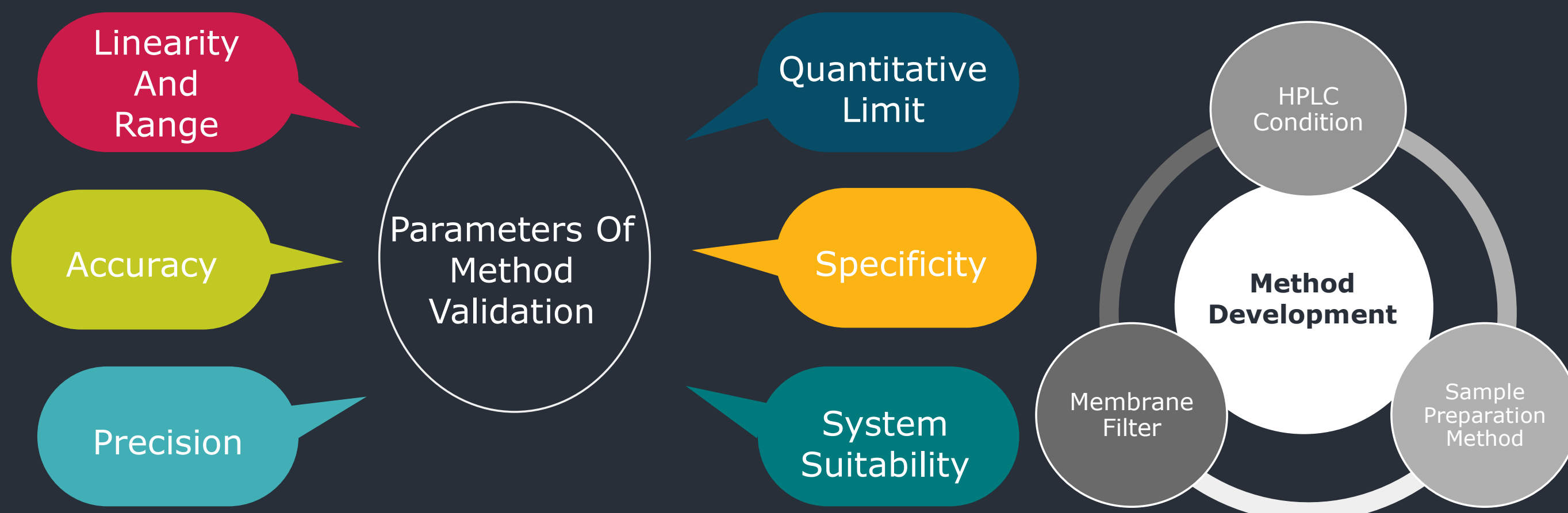
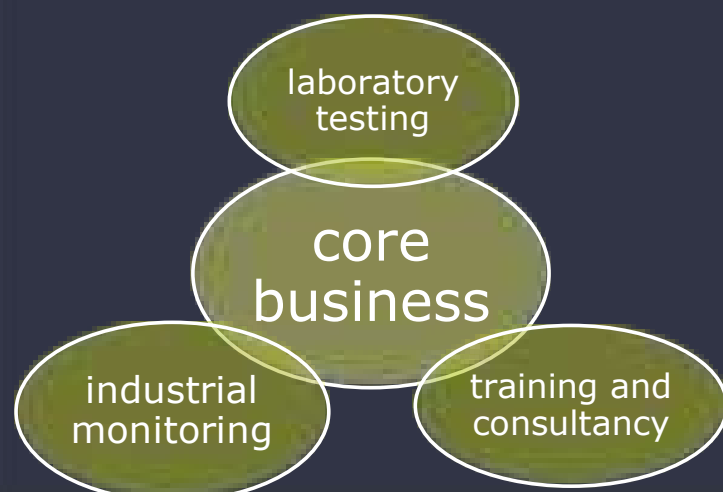
HPLC

Background of Company



□ established in 1998

□ MS ISO/IEC 17025 accredited testing laboratory.



Tel: +607 352 8227

Website: www.alliedchemists.com.my

Email: acslb@alliedchemists.com.my

ALLIED CHEMISTS LABORATORY SDN BHD

YEW ZHI POH

3SSCC | A18SC0352

✉ Zhi.poh,yew-1998@graduate.utm.my

📞 6012-7585058

01

BACKGROUND COMPANY

Established in 1998 as a leading testing laboratory that delivers high quality lab tests and monitoring services

- Core business :
- ☐ laboratory testing
 - ☐ industrial monitoring
 - ☐ training and consultancy

02

JOB SCOPE

- | | |
|----------------|------------------|
| ☐ pH | ☐ Nitrate |
| ☐ Turbidity | ☐ Cyanide |
| ☐ Conductivity | ☐ Ammonia |
| ☐ Color cu | ☐ Free chlorine |
| ☐ Color ADMI | ☐ Total chlorine |

03

ANALYTICAL INSTRUMENTS

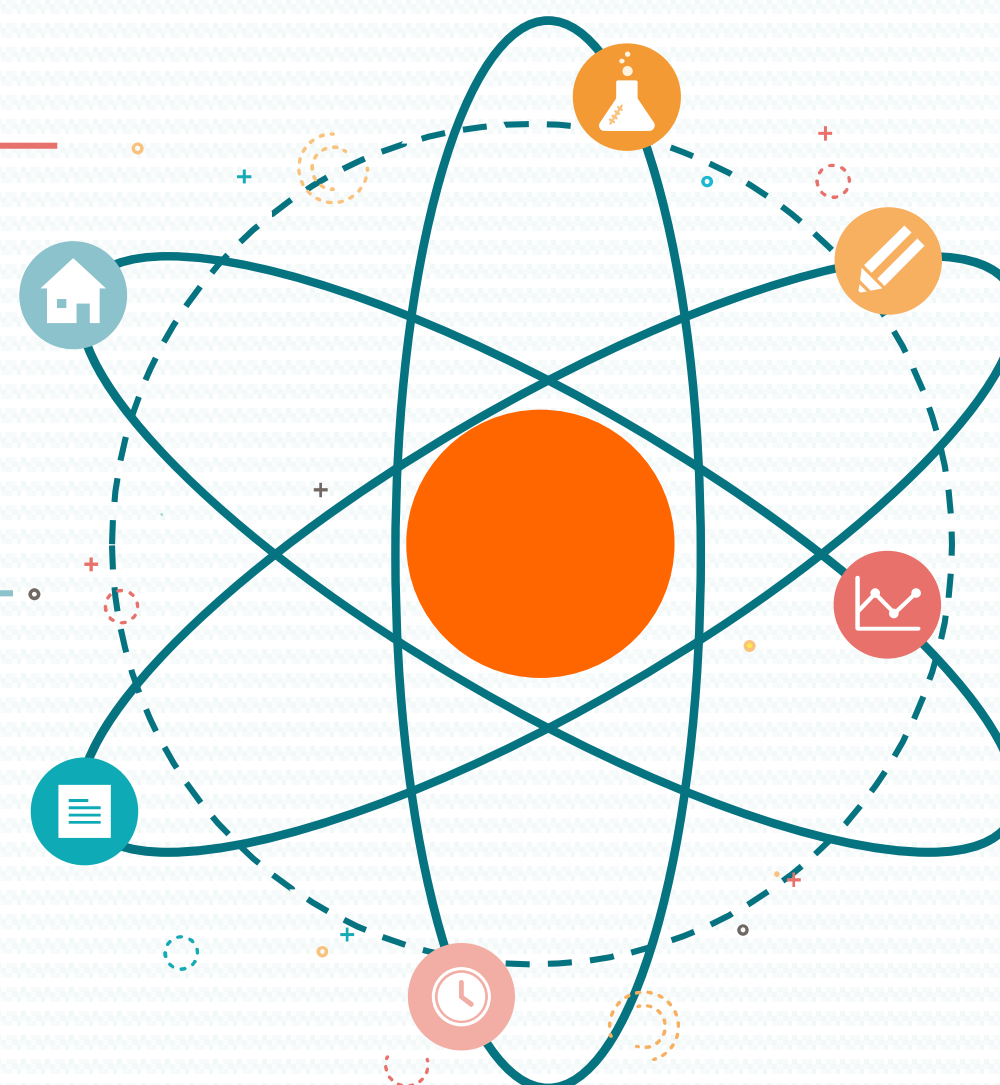
☐ ION CHROMATOGRAPHY



☐ ICP-OES



☐ ICP-MS



ALLIED CHEMISTS LABORATORY SDN BHD

📍 10, Jalan Bakawali 68, Taman Johor Jaya, 81100 Johor Bahru, Johor.

☎ Tel: + 607-3528227

✉ aclsb@alliedchemists.com.my

INDUSTRY SUPERVISOR

📄 Syahrul Syafiin bin Sulaiman, Chemist @ Water Section

☎ Tel: 016-2970417

✉ syahrul@alliedchemists.com.my

FACULTY SUPERVISOR

Dr See Hong Heng, Associate Professor
Department of Chemistry, Faculty
Science, Universiti Teknologi Malaysia
(UTM)



Company Background

Professional consultancy in environmental fields since 1979
Provides engineering solutions, water analysis and water treatment chemicals for wastewater management to help clients in managing wastewater system more efficiently

Company Address and contact



Envilab Sdn. Bhd
38A, Jalan Pingai, Taman Pelangi,
80400 Johor Bahru, Johor, Malaysia



Tel: +60 7 332 6277

Fax: +60 7 331 9357

jbe@its-envilab.com



Industrial Supervisor:
Chm Ms. Voon Wan Sin

Faculty Supervisor:
Dr. Nurrulhidayah Salamun

YONG HUI SYEN 3SSCC
A18SC0353



Lesson gained

- Handling instruments
- Time management skill
- Adaptability
- Communication skill

PREPARED BY

NOOR SHAHRAHITHAN
3 SSOC
ABS0071

TRAINING PLACE

**UTCL LABORATORY, KULIM
AGROTECH CENTER**

**LOT 2135, BATU 23 1 2,
JALAN KOTA TINGGI,
81900 KOTA TINGGI, JOHOR**

TEL: 07-882 1145

INDUSTRIAL SUPERVISOR

**PUAN NUR SYAFIQAH MOHD
SAADAN
CHEMIST**

FACULTY SUPERVISOR

**TS. DR. NAJI ARAFAT HAJI
MAHAT
SENIOR LECTURER
FACULTY OF SCIENCE
UTM**

Company background

- UTCL operates under Kulim Agrotech Center, a subsidiary company of Kulim Malaysia Berhad.
- Expertise in chemical and physical testing of samples ranging from Fertilizer, Soil, Effluent, Foliar, Water & Palm oil
- To meet the requirements of the Group's estates and mills as well as external parties.

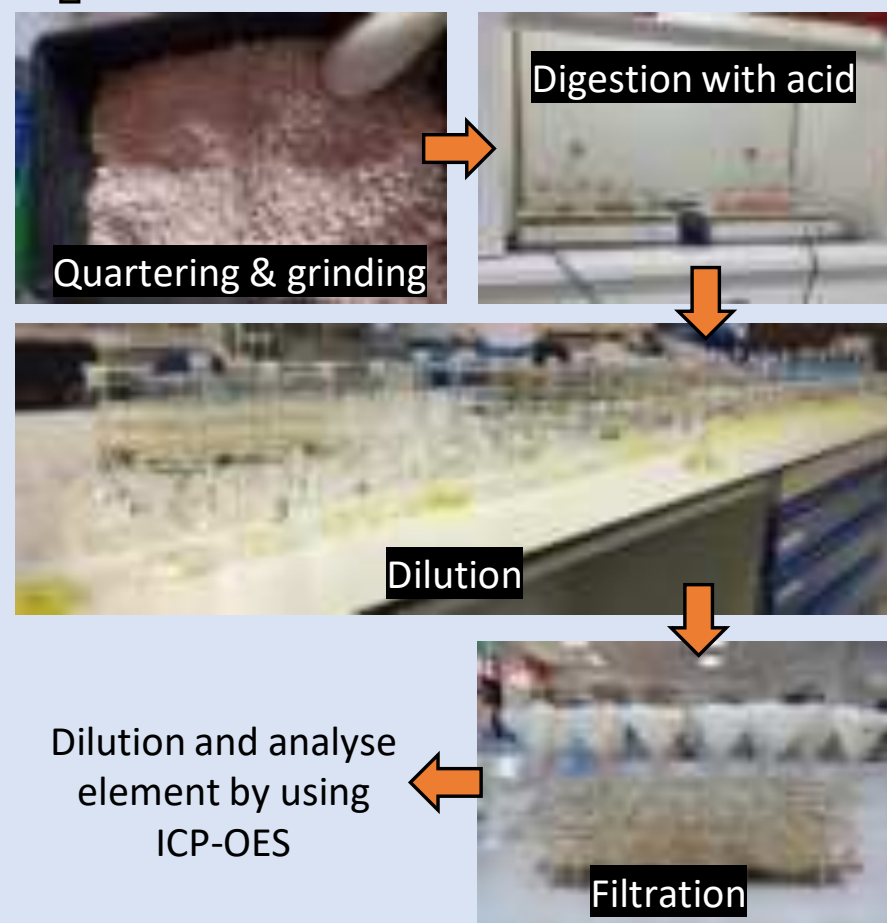
Job scope

In charge for **fertilizer section**:

1. Sample preparation
2. Determination of:
 - Total Nitrogen (Dumas)
 - Total Phosphorus
 - Total Potassium
 - Total Magnesium
 - Boron
 - Trace element (Zn, Mn, Cu)
 - Moisture
 - pH



Determination of pH & moisture



Experiences

- Expose in a realistic work environment like technical skills and industry demands
- Learned several testing from other section too like soil and effluent section.
 - Soil – pH, leaching method (to extract Mg, Ca & K), exchangeable Aluminium
 - Effluent – BOD, Total Nitrogen (Kjedahl method)
- Able to improve laboratory skills
- Learned how to do method validation and measurement uncertainty

Mini Project

DETERMINATION OF pH SOIL BY USING ORBITAL SHAKER AS A NEW TECHNIQUE OF SHAKING

Purpose: To confirm by examination and the provision of objective that the testing method is fit for the intended use.

Shaking sample manually for 1 minute



Shaking by using orbital shaker at 400 RPM 5 mins



Leco Carbon/Nitrogen Dumas Analyzer



FTIR / FTNIR



Eutech PC 450 – pH meter

Instrument Learned

VANCE BIOENERGY SDN BHD

COMPANY BACKGROUND

Vance Bioenergy Sdn. Bhd. is a fast growing of oleochemical manufacturer located at Pasir Gudang, Johor. Vance is a full member of the Roundtable on Sustainable Palm Oil (RSPO) and a founding Member of the Malaysian Biodiesel Association (MBA). The company is equipped with ISO 9001, Halal certificate, GMP certificate, Kosher certificate and etc in order to meet the quality of the products. The mission for Vance Bioenergy is to do their best fulfill customers' needs and constantly improve capabilities, products and services

JOB SCOPE

My job involved doing write up which the paper should consist minimum 5 pages based on the given topic for each intern. Next, I was assigned to monitor feedstock quality for my daily task.

MINI PROJECT

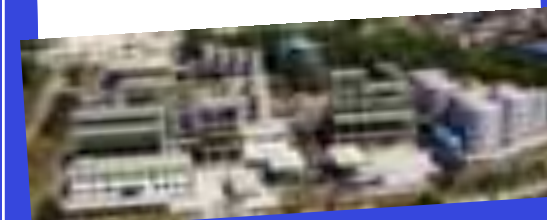
My supervisor had assigned interns who work from home to do research project. My research entitled 'Comparative Biodiesel Production using Renewable Resources with Conventional Diesel'.

WHAT I HAVE LEARNT?

Through this training, I have gained knowledge from research project and also learn to improve on writing review paper for my final year project. I have also improved my skills especially in basic computer skills where I have to use spreadsheet tool for working.

ORGANIZATION DETAIL

Address: PLO 668 & PLO 669, Jalan Keluli 5, Kawasan Perindustrian Pasir Gudang, Johor, Pasir Gudang, 81700 Pasir Gudang, Johor
Company website:
<https://www.vancebioenergy.com/>
Phone: 07-257 1328





INTERNSHIP INFOGRAPHIC DUOPHARMA BIOTECH BERHAD



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



PERSONAL DETAILS

Name: Pavithran A/L Krishnan
Matric: number: A18SC0286
SV Faculty: Dr. Khairil Juhani
SV Company: Mr. Ananda Rajah (HEAD)
Muhd Zubair bin Nazir

COMPANY DETAILS

- Duopharma Biotech Berhad began with the establishment of Duopharma (M) Sendirian Berhad in 1978.
- Duopharma Biotech was incorporated in 2000 and is today one of **Malaysia's leading pharmaceutical companies** listed on the Main Market of Bursa Malaysia Berhad.

ENGINEERING DEPARTMENT

PACKAGING AND LABELLING DEPARTMENT

GENERAL PRODUCTION

QUALITY CONTROL

ENGINEERING DEPARTMENT

Wastewater treatment plant

- MBR: Offline (manual) chemical cleaning
- Membrane Bioreactor (MBR) tank

Wastewater Parameter Testing

- Chemical Oxygen Demand (COD)
- Dissolved Oxygen (DO)
- Suspended Volume: 30 Minutes (SV30)
- Total Suspended Solid (TSS) and pH

Water system

- Purified water and water for injection
- HAEMO Water System
- Deionized Water System

GENERAL PRODUCTION

- Dispensing
- Granulation
- Sieving & Milling
- Drying & mixing
- Capsulation & Tableting
- Coating
- Blistering and Packaging

QUALITY CONTROL DEPARTMENT

- Deionized water testing
- Physical Test of 'Glucoxit' 500mg
- Titration & Identification testing 'Zubhee' Vitamin C
- Flame AAS Testing on B1 Haemo-sol.
- Finished goods, stability study, and uniformity on 'Methazine' tablet, testing using HPLC
- Particle measurement 'Udoxon' sample ampule

PACKAGING AND LABELLING DEPARTMENT

- Warehouse & Serialization
- Packaging Sinopharm COVID-19 vaccine Vero Cell SARS-CoV-2





KELANTAN

Industrial Training

DEPARTMENT OF ENVIRONMENT
NEGERI KELANTAN

SSCU3903

FUNCTION
TO PREVENT, ELIMINATE,
CONTROL THE POLLUTION AND
PRESERVE THE ENVIRONMENT IN
ACCORDANCE WITH EQA 1974 AND
ACTS RELATED UNDER IT.

VISION
ENVIRONMENTAL CONSERVATION
FOR THE WELL-BEING OF THE
PEOPLE.

MISSION

TO ENSURE SUSTAINABLE
DEVELOPMENT IN THE PROCESS
OF NATION BUILDING.

TRAINING EXPERIENCE

- Creating poster, infographic
- Data entry, filing (PAT)
- Joined meeting EIA
- EIA compliance monitoring
- Joined practical programme
- Groundwater sampling
- Open burning investigation
- Peatland monitoring
- Do mini report
- Joined webinars



NYR IZZATI ALIYAH RINTE KADUAN (SKMCC)

115512001

115512001

15, JALAN DE LAUNYAK, KAMPUNG BANGSAKUN

70100, KUBANG KERUHAN, NEGERI KELANTAN

and felt



TERENGGANU



MAZ RESOURCES SDN. BHD.

Name: NURUL AINAA BINTI SALLEH

Industrial Supervisor: ENCIK MOHAMAD HISYAM BIN ISMAIL

Matric No.: A18SC0259

Faculty Supervisor: DR. FAZIRA ILYANA BINTI ABDUL RAZAK

Course Code: SSCU 3905

COMPANY BACKGROUND

- Established on January 2004.
- Located on Kawasan Perindustrian Chendering, Kuala Terengganu.
- Specialize in manufacturing cleaning chemical for various industries.



BUSINESS ACTIVITIES

- Processing and manufacturing product for petroleum industry.
- Processing and manufacturing cleaning product for commercial market.
- Trading and catering goods to oil and gas industry.

TRAINING EXPERIENCED

- Joining talk
- Fill product tagging
- Weight raw materials
- Viscosity test on products
- Project on creating fabric softener

PRODUCTS

- rigwash (RW100)
- hand wash (HW101)
- hand gel (HW102)
- powder and liquid detergent
- hand sanitizer
- floor cleaner
- disinfectant cleaner

TASK

VISCOSITY TEST ON LIQUID DETERGENT LAVENDER

- Viscosity of the liquid detergent lavender were tested before and after put into water bath for 72 hours at 40°C.

VISCOSITY TEST ON DISHWASING LIQUID

- Viscosity of the dishwashing liquid was tested before and after adding mega blue perfume.

PROJECT

TRIAL 1: FABRIC SOTENER SOFT ACTION

- The experiment was successful in making the product but the fragrance not last longer

TRIAL 2: FABRIC SOTENER PINK FRESH

- The experiment was not successful because small white precipitate form on fabric when used it.

TRIAL 3: FABRIC SOTENER BASE

- The procedure is same as Trial 1 and 2 by mix the CMC with water first then after it dissolve, esterquat was added.
- This trial is fail as the base solution form small white suspension.

TRIAL 4: FABRIC SOTENER BASE

- The procedure for Trial 4 is different from others because the CMC was mixed with esterquat first, then after it dissolve the mixture was added into water.
- This trial is fail as the base solution form small white suspension.

TRIAL 5: FABRIC SOTENER BASE

- The procedure for this trial was different because esterquat was mixed with NP-10 before it mixed into CMC solution.
- The trial was successful in making the base.

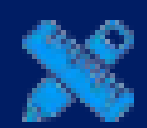
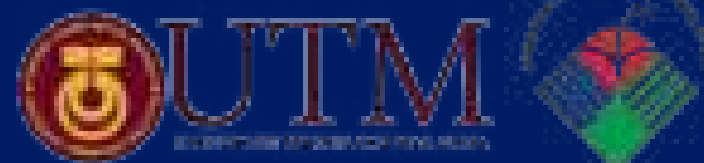


MISSION

To ensure sustainable development in the process of nation building.

VISION

Environmental Conservation for the Well-being of the People.



RESEARCH TRAINING AT JABATAN ALAM SEKITAR (JAS) NEGERI TERENGGANU



COMPANY PROFILE

This department is responsible for ensuring sustainable development in the process of national development and the environment is always clean, healthy and safe for the well-being of the people. DOE also serves as a disseminator of information, skills and thoughtful ideas for the development of the community's mind towards the continuous appreciation of the natural environment. This includes promoting the concept of self-compliance by the industry as well as the general public.



DIVISIONS



ADMINISTRATION

financial and management of office works



OPERATIONS

fixed Cause Enforcement Unit, Complaints, motor vehicles and prosecution



DEVELOPMENT

education unit, information technology and Environmental Impact Assessment (EIA)



EXPERIENCES UNDER THE UNITS

EIA

a planning evaluation application for development activities made to minimize the impact on the environment

ADMINISTRATION OR FINANCE

office works

MOTOR VEHICLES

a unit responsible for checking smoke emissions as well as polluted gases released through motor vehicle exhaust

ENVIRONMENTAL QUALITY MONITORING

ground water and air quality

COMPLAINTS

manage pollution complaints received from the public

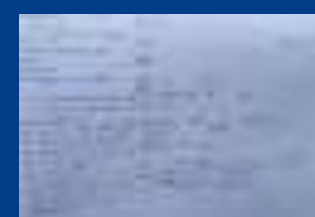
EDUCATION AND AWARENESS

disseminating information and awareness to the community about environmental care



PROJECT

GROUND WATER QUALITY MONITORING



SUMMARY AND SUGGESTIONS

This course (SSCU 3915) is compulsory to all students to have their research or industrial training for 3 months. The main objectives are to provide exposure to the working environment and gain new experiences about the company to improve any skills obtained by working with them.

My suggestions are providing more period time to students as they have no enough time to experience all the works given in the company AND completing their report/log book/infographics. Besides, the students should have their internship after the final semester.

NUR ANILLY SYHAFINAZ
BINTI ABDULLAH
A18SC0193
3 SSCA

INDUSTRIAL SUPERVISORS

PUAN MAISARAH BINTI MOHD NOR
PUAN ZALEHA BINTI ABDULLAH

FACULTY SUPERVISOR

DR FAZIRA ILYANA BINTI ABDUL RAZAK



INDUSTRIAL TRAINING

SSCU 3905

Upstream Downstream Process & Services Sdn Bhd

Major services provided to the industries



•Mechanical & Engineering Services

•Supply Chain Management Services – Trading & Equipment Rental

•Training & Consultancy – Comprehensive Mercury, Respiratory Fit Test and Technical Training

•Water Injection Services

•Laboratory Testing & Analysis



INTERNSHIP PROJECT

- Analysis of Mercury in Biological Fluid
- Determination concentration to remove rust by using ammoniated citric acidP

NAME MUHAMMAD MIRZA BIN MAHDI
PROGRAMME 3 SSCC
TRAINING PLACE UPSTREAM DOWNSTREAM PROCESS & SERVICES SDN BHD
DATE 11TH JULY 2021-30TH SEPTEMBER 2021
FACULTY SUPERVISOR DR. FAZIRA ILYANA BINTI ABDUL RAZAK
COMPANY SUPERVISOR PN. NURULAIN BT GHAZALI



Internship at Universiti Malaysia Terengganu (UMT)

Introduction: It was officially operated on 1st August of 2019 where it is initially from Pusat Pengajian (Pusat Pengajian Sains Marin and Pusat Pengajian Sains asas) and established from the experts of Marine Science, Science Chemistry and Science Biology.

Activities (work from home)

Literature Review

I have done literature review about some topics with my supervisor guidance and advices. Every task need to be submitted and checked by my supervisor.

- Mariposa christia vespertilionis and Vietnamese coriander leaves
- Bioprinting and Green synthesis
- TGA (thermogravimetry) & DSC (differential scanning calorimeter) profile of magnesium oxide nanoparticles (MgO-NPs) and zinc oxide nanoparticles (ZnO-NPs)
- Phytochemicals



Online Programme

I was introduced to STITCH 5.0 and me and my supervisor study together about STITCH 5.0

STITCH



Experiences

- Survived new working from home experience
- Acquire and polish my communication skills, independent and working ethics even though through virtually



Supervisor Details:

- AP. Dr Hanis binti Mohd Yusoff
- Lecturer
- hanismy@umt.edu.my
- 016-2405742

Prepared by
Nashira binti Haniff
nashira@graduate.umt.my

INDUSTRIAL TRAINING

Name: Muhammad Zulhilmi Bin Rosli (A18SC0157)
Company Supervisor: Azemi Bin Mustafa
Faculty Supervisor: Dr. Rohul Hayat Bin Adnan
Training Period: 11/7/2021 – 30/9/2021

Background of Company

Initially, Bekalan Air Terengganu was under Jabatan Kerja Raya (JKR) management.

In 1995

- Then, JBAT was established and separated from with JKR.
- It is part of the government department formerly known as Jabatan Air Terengganu (JBAT).

In 1999

- SATU was officially established on 1st July.
- Now, SATU was the property of the Terengganu state government.
- SATU Headquarters located in Kuala Terengganu city.

Mission

- To be the best water supplier in Malaysia.

Vision

- Provide enough high quality of clean water supply and improve the service quality to ensure consumer satisfaction.

Flow of WTP in Kepong 2

Inlet Tower

- Raw Water from Intake Serada River.
- Pre-Lime Dosing (Function as pH adjusting).

Aeration Tank

- To remove dissolve gas.
- Increase oxygen level.
- Reducing odor of Raw Water.

Flocculation/Coagulation

- Dosing of Aluminium Sulphate to form solid dense floc.
- Rapid mixer on each flocculation tank.

Sedimentation Tank

- Lamella system and Scrapper system.
- Separate floc.
- Sludge traps at clarifier and settle to sedimentation tank.

Filtration

- Polishing steps(Remove small floc/precipitated particles.
- Backwashing process to wash dirty filters every 72 hours or depends on other criteria (Lost of head).

Clean Water Tank

- Dosing of Chlorine function to kills parasites, bacteria and viruses.
- Dosing of Post-Lime to adjust the pH again.
- Dosing of Fluoride to reduce tooth decay and preventing cavities.

Pump House

- Pump House has 16 treated water pump with different capacities that divided into 4 zone.
- The rate of motor pump was 400 kW.
- Location of Pump Distribution:
 - Bukit Panji Tank
 - Bukit Berangan Tank
 - MIEL Tank
 - Bukit Gondang tank

Recycle Tank

- Wash water from backwashing process will flow into the Recycle tank.
- The water will flow back to inlet tower to be treated again.

Site Visit

1. Kepong 1 Water Treatment Plant (90 MLD)



2. Bukit Losong Water Treatment Plant (44 MLD)



PAHANG

NURUL ATIKA NADHIRAH BINTI MOHD
A18SC0264



INTRODUCTION :

Medieva Sdn Bhd was established on 4th October 2017 and a developing of natural products and healthcare. The products produced were free from ALCOHOL, PARABEN, SLS & SLES and SYNTHETIC COLOURING.

MEDIEVA SDN BHD
KOMPLEKS UMP
HOLDING,
LEBUHRAYA TUN
RAZAK, 26300
GAMBANG,
KUANTAN, PAHANG

AUREIZ'S PRODUCTS



Handwash

Multipurpose
spray

Bodywash

JOB SCOPE:

- Marketing
- Documentation and filling
- Preparation of educational video
- Poster making
- Preparation of proposal
- Development of SOP

SUPERVISOR:

- Faculty:
Associate Prof Dr. Lee Siew Ling
Department of Chemistry
- Industry:
Associate Prof TS. Dr.
Norashikin Binti Mat Zain
Director of Medieva Sdn.
Bhd

SSCU 3915 RESEARCH TRAINING

NAME: NORHATIKAH BT ABDUL HAMD
COURSE: 3SSCA
COMPANY SUPERVISOR: ASSOC. PROF. TS. DR. NORASHIKIN MAT ZAIN
COMPANY: MEDIEVA SDN BHD, KOMPLEKS UMP HOLDING, LEBUHRAYA TUN RAZAK, 26300 GAMBANG KUANTAN, PAHANG

Company Details

Medieva Sdn Bhd is a developing business of natural products and healthcare. Medieva is established in 4th October 2017. The main product of Medieva is Aureiz.



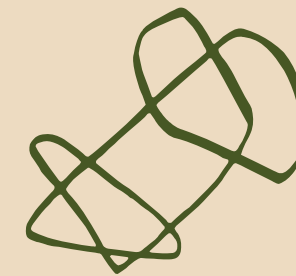
Aureiz



Experiences

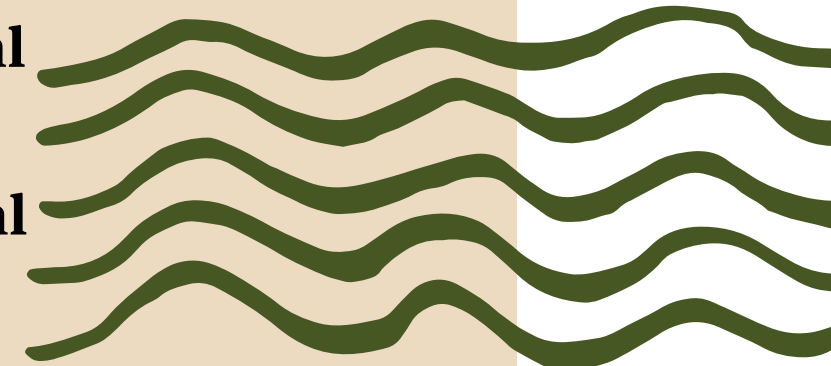
This training was conducted fully work from home. Most of the task related to journals reading and proposal writing. Example of task:

- Proposal writing
- Reformatting journal
- Make educational poster



Projects

- Research proposal about aphiteraphy (honey and propolis) to formulate hair serum and facial serum
- Reformat a thesis paper into Jurnal Teknologi research paper.





SARAWAK

INTERNSHIP JOURNEY

COMPANY BACKGROUND

THE FORENSIC DIVISION (D10) AT SARAWAK CONTINGENT POLICE HEADQUARTERS HAS BEEN ESTABLISHED SINCE 2005. THIS DIVISION IS GIVEN THE AUTHORITY TO CONDUCT CRIMINAL INVESTIGATIONS FOR THE ENTIRE STATE OF SARAWAK. IT PLAYS AN IMPORTANT ROLE IN CONDUCTING CRIMINAL INVESTIGATIONS BY COLLECTING DNA / FINGERPRINT SAMPLES, ETCHING AS WELL AS CRIME SCENE INVESTIGATION.

Whole new insight understanding about crime scene investigation

CRIME SCENE VISITATION



ACTIVITIES



JOB SCOPE

ASSIST THE TEAM AT CRIME SCENE VISITATION

COMPLETE ASSIGNMENTS GIVEN TO PRACTICE SKILLS AND KNOWLEDGE IN THE FORENSIC FIELD

PRESENT INPUT AT THE END OF INTERNSHIP

INDUSTRY SUPERVISOR

DSP ROSE AK CHERANG
PEGAWAI TURUS D10

FACULTY SUPERVISOR

DR MOHAMAD AFIQ BIN MOHAMED HURI
DEPARTMENT OF CHEMISTRY, UTM
SKUDAI

The image features a large, stylized logo of the state of Sabah, Malaysia, on the left side. The logo is composed of a grid of triangles in various shades of blue and white. To the right of the logo, there is a graphic of a mountain range in dark blue against a light blue sky, with a red horizontal band below it. The background is a mix of light blue and white geometric patterns.

SABAH

ALS

Asiatest Laboratory Services Sdn Bhd

Mezz. Floor, No. 3, Lot 5, Lorong Kilang (SLIE), Off Jalan Kilang Kolombong, Jalan Ulam Raja, 88450 Kolombong, Kota Kinabalu, Sabah.



Introduction

A part of a ALS Global group of companies that are expert in various laboratory analytical analysis and tests



Technical Work

Sample Registration:

- Under Chemical & Microbiology Departments
- Samples must be registered first in order to proceed with tests and analysis



Chemical Department

Conduct analysis and tests requested by the clients on water samples with the continuation of results calculations

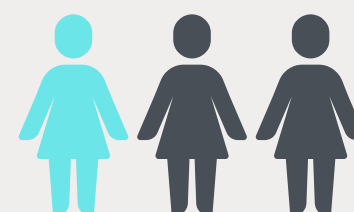


Non-Technical Work

- Scheduled waste management
- Inventories restock
- Preparation of sample bottles for clients
- Sample labelling

Data Analysis

Uses SAMM that was previously administered by SAMM National Council, which is currently under the authority of the MITI



What I Learned

- How to accurately conduct 11 different analysis
- Improved pipetting skills
- The importance of accuracy and precision



REHPRO SCIENTIFIC SDN BHD



PROVIDING ANALYTICAL TESTING SERVICES FOR WATER, WASTE WATER AND EFFLUENT SAMPLES FOR REGULATORY COMPLIANCE AND OTHER OTHER EQUIPMENT



Assign mainly as laboratory assistance and running more than 20 parameters every weeks.



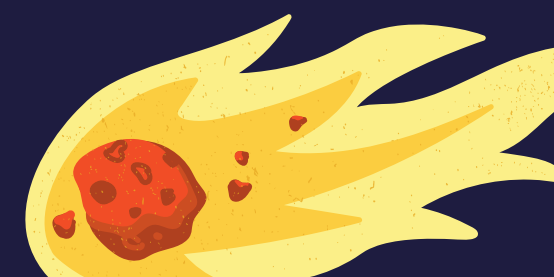
Outstation Work at a Powerplant: To learn how to collect sample, preserving sample and the flow process of industrial effluent.



- Office work, CHRA.
- Raw data documenting for analytical result.



- Gain new friends.
- Gain new skill such as collecting sample method.
- Gaining new knowledge such as water waste & industrial effluent flow process.



INTERNSHIP AT ALSKK

MEZZ. FLOOR, NO. 3, LOT 5, LORONG KILANG (SLIE), OFF JALAN KILANG
KOLOMBONG, JALAN ULAM RAJA, 88450 KOLOMBONG, KOTA KINABALU, SABAH

INTRODUCTION

ALS Kota Kinabalu provides world class analytical services to the Environmental sectors and uses STANDARDS MALAYSIA (SAMM) as the standard

CHEMICAL DEPARTMENT

Provides various types of analyses in the environmental sector such as pH value and Residual Chlorine



TECHNICAL WORK

Sample registration: The purpose is to register clients' new samples in the company's system for easier workflow.

The sample receipt process involves 3 main processing steps, as carried out by:

1. Sample receipt
2. Work order creation
3. Work order committal



NON-TECHNICAL WORK

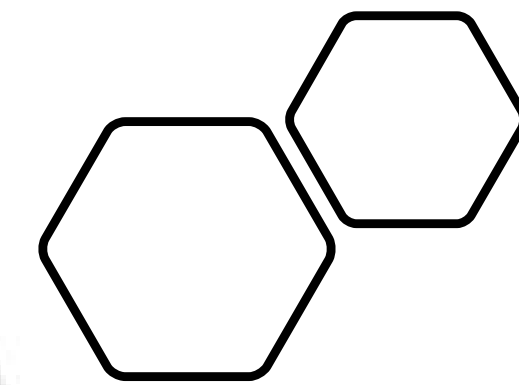
1. Waste disposal
2. Documentation
3. Lab daily check
4. Restock inventory
5. Preparation of sample containers
6. Sample containers labelling



CONCLUSION

1. Improved laboratory skills
2. Gained industrial experience
3. Improved technical skills
4. Improved communication skills
5. Gained networking skills

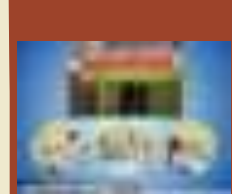
BY: ANGELLE PATRICK JOHN A183C0022



REHPRO SCIENTIFIC SDN BHD

LOT B5-2C, 5TH FLOOR, FLOOR, BLOCK , KWSP BUILDING, KOTA
KINABALU

REHPRO



ABOUT REHPRO

REHPRO SCIENTIFIC SDN BHD is a private company with the goal of providing quality and professional consulting and training services in the field of Occupational Health, Safety, and Environment management systems. They are promoting and improving operational efficiency and production in a safe and healthy atmosphere.

OFFICE WORK

Quotation, Invoice, Statement of Account, Environmental Compliance Audit, and Test Report are some of the work office that I did during 10 weeks period of my internship. Besides, I also communicate with clients through direct phone call and email.



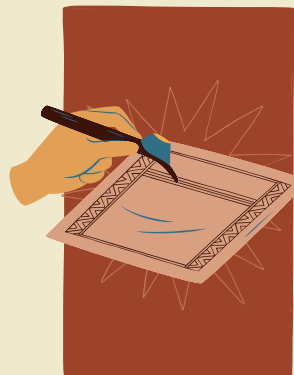
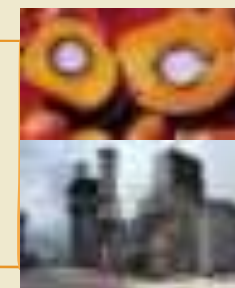
LAB WORK

I have conducted some analysis by running more than 20 samples. The analysis were Ammoniacal Nitrogen, Total Solid, Total Suspended Solid, pH, NTU, BOD, and COD.



OUSTATION

- Social Impact Assessment by interviewing peoples in the village near with Teck Guan Palm Oil Mill.
- Collecting effluent samples at Ranhill Power O&M Sdn. Bhd.



OUTCOME

- Communication skills improved.
- Sample solution preparation & knowledge improved.
- Experienced in collecting samples at one of the biggest company in Sabah & learned how to collect sample properly.
- Experienced in working with real co-workers & company which I can improve my personalities, skills, and knowledge.



RIKO SOLUPIN
A185C0291

REHPRO

REHPRO SCIENTIFIC SDN BHD

1

INTRODUCTION

REHPRO SCIENTIFIC SDN BHD provides quality and professional consultancy and training services in area of OSHE management system and Laboratory Analytical services.

2

ROLE

Assigned under Health, Safety & Environment (HSE) Department as an assistant.

3

WORK

Office work : EIA, SIA & PMM report writing etc.
and Cartography

Outstation : ECR, Water Sampling W1, W2 &
W3 and SIA Interview

4

CONCLUSION

- > Improved communication skill
- > Learn how to collect sample
- > Learned cartography



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