

2019 CHEMISTRY



INTERNSHIP INFOGRAPHICS

SSCA : Bachelor of Science (Chemistry)

SSCC : Bachelor of Science (Industrial Chemistry)

INTERNSHIP 2

INFOGRAPHICS

SSCA & SSCC

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1
9

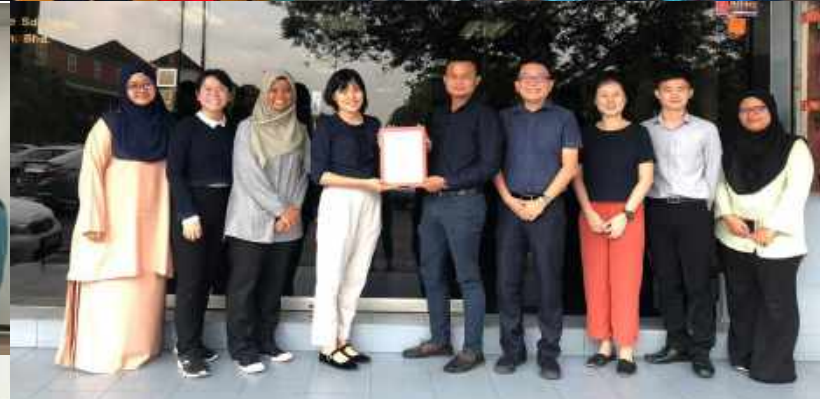
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Johor
MALAYSIA

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Preface

After our first ever success in publishing Chemistry Internship Infographics for the last two consecutive years (2017 & 2018), 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 2019.

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 the last short semester break. Hopefully all of you were able to enhance your knowledge and technical skills that you had learned in university, in addition to gaining valuable work experience. Industrial/research training is where you have the opportunity to practise your communication and teamwork skills, besides being able to practice good qualities of integrity, responsibility and self-confidence in real working environment. The work experience is definitely different from one student to the other but surely there are lots of lessons learned during this period of 12 weeks.

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.

Associate Professor Dr. Shajarabtinunur Jamil
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.

Jawatan Kuasa 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



ROI

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



RO2

Lifelong Learning AD1
Communication Skills AD3



RO3



Personal Skills

Teamworking Skills

Corporate Behaviour

CONTINUOUS ASSESSMENTS

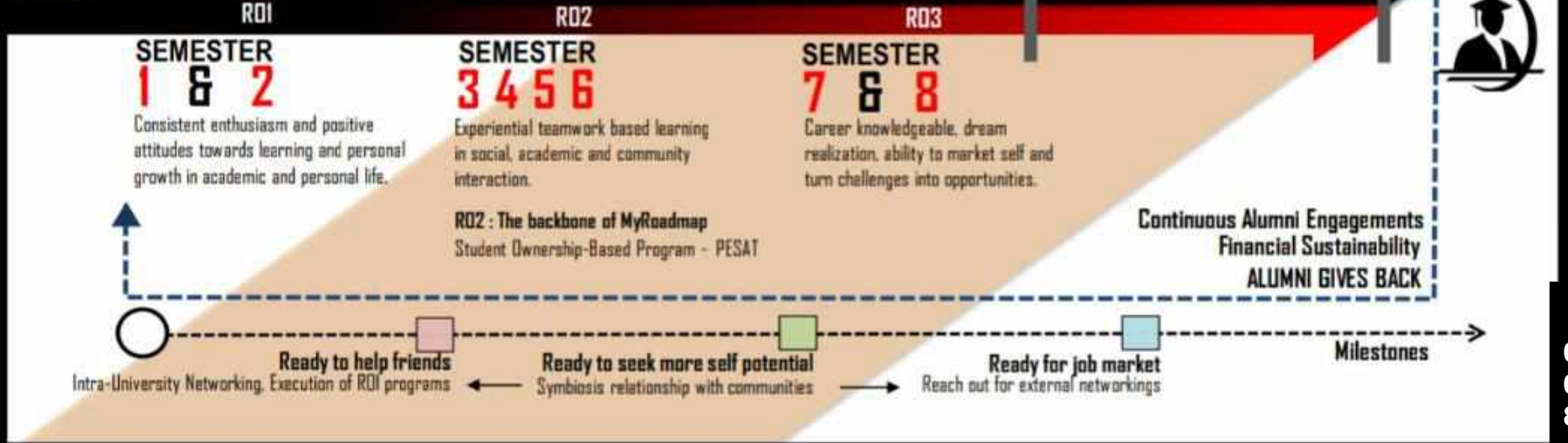
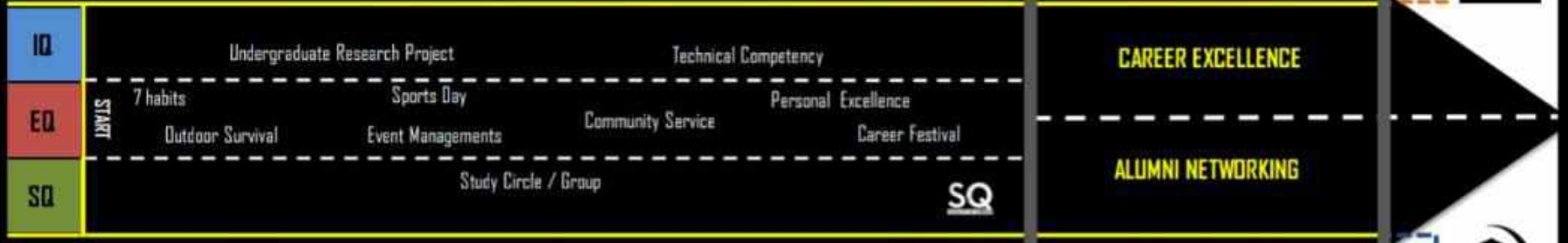
Year 1

Year 2

Year 3

Year 4

Working Environment



SEMESTER 1 & 2

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

SEMESTER 3 4 5 6

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

SEMESTER 7 & 8

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 ROI programs

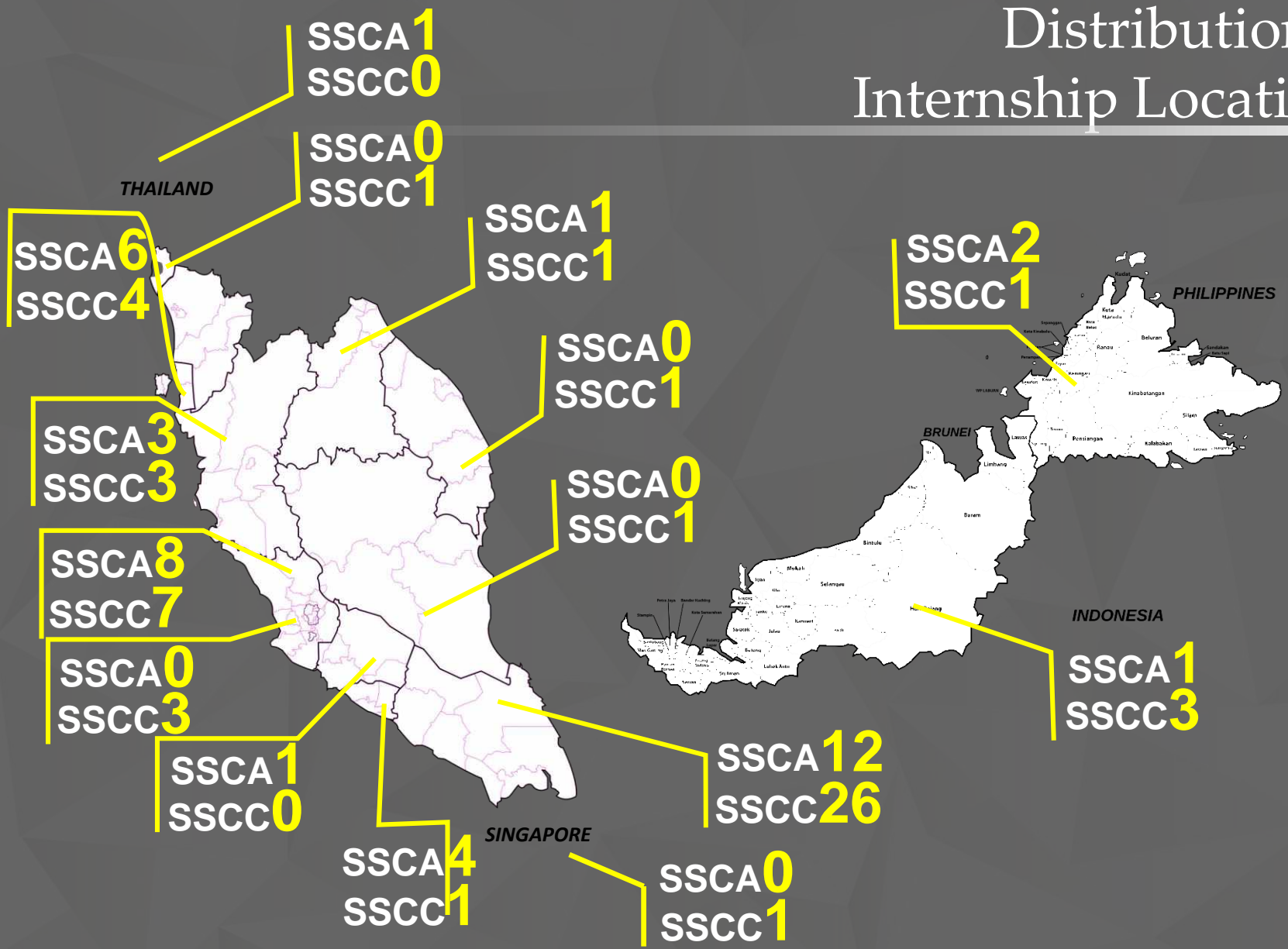
Symbiosis relationship with communities

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.**



Distribution of Internship Locations



DISCLAIMER

All students of SSCA & SSCC were given the freedom to express their own creativity and ideas in words, pictures and graphics, obtained from various sources that may or may not include resources from the internet. There is no restriction on the presentation ideas; editing is very minimal. This compilation of internship infographic is solely meant for learning purposes.



PERLIS

CEMENT INDUSTRIES OF MALAYSIA BERHAD

PERLIS PLANT

Prepared by: Siti Asmidar Che

CEMENT INDUSTRIES OF MALAYSIA BERHAD



About CIMA

NSCI operates 2 cement plants which at Bahau and Perlis. Both plants produces Ordinary Portland Cement (OPC), Composite cement, and Masonry cement.



CIMA Quality System

The company really cares about customer satisfactions, product quality, effective prevention and continual improvement.

Quality System:
-ISO9001:2008
-ISO9001:2015
-MS17025:2015



Mega Project in Malaysia

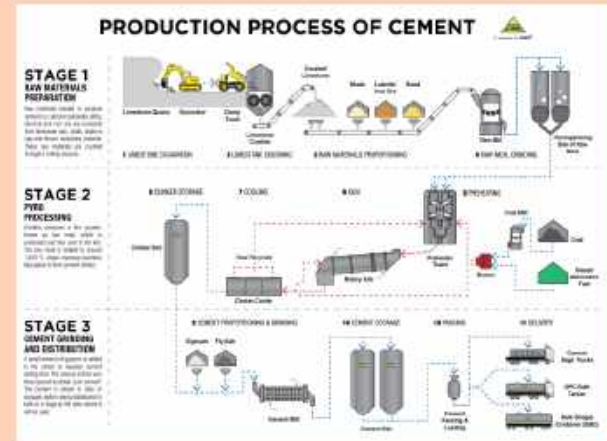
CIMA supplies products to many mega project throughout Malaysia such as Sultan Abdul Halim Mu'adzam Shah Bridge, Klang Valley MRT, Electrified Double Track Project (EDTP)



Training Activities in QC Department

Applies a lot of tests and analysis during the training period such as fine coal&fuel oil testing, chemical analysis, tensile making, crushing, material controls, fuel oil sampling, raw material preparation, and 5S System

Process of Cement Production



Visit or Contact CIMA @ Perlis Plant!

Negeri Sembilan Cement Industries Sdn Bhd
Bukit Ketri, Mukim of Chuping
02450 Kangar, Perlis
Phone No. : +604 9367100



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



PENANG

Introduction

Eurofins NM Laboratory is a certified laboratory providing various analytical testing services that envisions to be the world leader in the bioanalytical testing market. Eurofins aims to contribute to global health and safety by providing customers with high-quality laboratory and advisory services whilst creating opportunities for our employees and generating sustainable shareholder value. The services provided are on environmental testing, industrial & consumer product testing and food & feed testing.

Job Scope

- Sample Preparation
- Sample Treatment
- Polycyclic Aromatic Hydrocarbon (PAH) Test
- Phthalates Test
- Polybrominated Biphenyl (PBB) Test
- Polybrominated Diphenyl Ether (PBDE) Test
- Formaldehyde Test



Supervisor Details

Industrial Supervisor

i. Ms. Hing Soon Miao

ii. Ms. Siti Hazreena bt Tajul Hasnan.

Internship Experience

My four biggest key takeaways are:

1. The Importance of Apparatus Cleanliness.

- To have a good analysis results, one chemist must first know how to clean apparatuses and places huge significance on cleanliness regardless of how competent one chemist is on his skills.

2. Exposure

- I always ask myself how does all those theoretical parts in chemistry that I learned in my lectures can be applied and commercialised in industrial manner. Through this experience, I finally found the answer from the analytical tests done, which allow me to have a better grasp of understanding on a chemist competency and thus being able to plan out my personal learning and development desires to be a professional established chemist.

3. Be Strategic

- Dealing with so many samples and tight deadlines on a daily basis, I learnt how to be strategic and plan ahead based on my own capability and capacity to complete the tasks on hand, and being able to communicate them to the team to ensure the team knows my well-being and being supportive and collaborative towards each other to achieve our final goal: Clients' satisfaction.

4. The Power of Questions: Why?

- Ms Hing emphasised strongly on staying curious always and challenge the process, challenge the procedures by thinking more and innovate along the way, instead of blindly accepting. One should always keep learning and stay on par with the current world development and technological enhancement no matter what age one is in.

EUROFINS NM LABORATORY SDN. BHD.

78 & 80, Lorong Perda Selatan 1, Bandar Perda, 14000
Bukit Mertajam, Pulau Pinang

INTRODUCTION

It is a certified laboratory providing various analytical testing services. Services provided include sampling and analysis of natural water, processed water, waste water, solid waste, contaminated soils, Local Exhaust Ventilation (LEV) Inspection & Testing and so on.



JOB SCOPE

- pH Test
- Suspended Solids Test
- Total Solids Test
- Total Dissolved Solids Test
- Turbidity Test
- Colorimetric method (UV-Vis Spectrophotometer)



TSS test



Total solids test

INTRUMENTS

- pH meter (Eutech pH 2700)
- UV-Vis Spectrophotometer (HACH DR 6000)
- Turbidity meter (HACH 21000)



PRICELESS EXPERIENCE

This industrial training allows me to expose to the working environment, which will train us to apply the theoretical knowledge learned during the lecture in the work.

The industrial training help us to prepare ourselves in the aspect of physically and mentally for more challenging tasks in the future. I have learnt how to calibrate the instruments and also the QC.

I was given an opportunity to participate in their daily routine works, from sample preparation to sample testing which enable me to handling different instruments.

SUPERVISOR DETAILS

Industrial Supervisor

- Ms Hing Soon Miao
- Ms Khor Zych Bin

Faculty Supervisor

- Dr. Muhammad Firdaus Bin Omar

KHEOH ZI HOON
A16SC0081
3/SSCA





DETAILS

MY CO₂ (PG) SDN BHD
16, Lengkok Kikik 1,
Taman Inderawasih, 13600 Perai,
Penang, Malaysia
04-3808282
equiry@myco2.com.my
www.myco2.com.my

MY CO₂ BACKGROUND

MY CO₂ is an independent laboratory, plays a neutral role in providing high quality analytical testing services and capable of performing chemical, microbiology, nucleic acid and physical analyses for petrochemical, industrial, consumer and pharmaceutical products.

Introduction

Research SYAZWAN ZOHIR
3SSCA
Training MY CO₂ SDN BHD

INDUSTRIAL SUPERVISOR

MR. OOI KAH WAI
ASST. TECHNICAL MANAGER
MY CO₂ SDN BHD

FACULTY SUPERVISOR

P.M. DR. RAZALI ISMAIL
SENIOR LECTURER
DEPARTMENT OF CHEMISTRY



LESSON GAINED

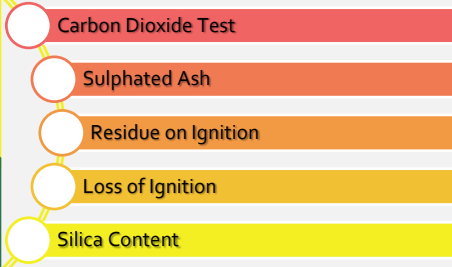
- ✓ Learnt various type of sample preparation
 - Laboratory skills
- ✓ First-hand experience in working environment
 - Adaptable and fast learning
- ✓ Social Skills
- ✓ Communication Skills
- ✓ More confident

Training & Main Activities

Sample Preparation



Sample Analysis



Mini Project

Biochemical Oxygen Demand (BOD)
APHA 5210 B (2005)

Title
The study of Glucose-Glutamic Acid (GGA) in Five Day Biochemical Oxygen Demand (BOD₅)

Objective
To find the possible factors that can affect the result of BOD₅

TEXCHEM MALAYSIA SDN. BHD.

INTRODUCTION

Textile Chemical Manufacturing and developing:

- textile dyeing,
- printing auxiliaries
- Washing chemicals
- 'Wrinkle free' resin
- hydrophilic softening agents
- Desizing
- scouring agents.

- ❑ Evaluation of reformulated binder product in pigment printing process.
- ❑ Evaluation of new softener product
- ❑ Quality check of raw material and finished product.

JOB SCOPE

LESSON LEARNT

- ❖ Team Work
- ❖ Multitasking
- ❖ Time management
- ❖ Communication skills

Address: Plot 256,
Lorong Perusahaan
10, Prai Industrial
Estate, 13600 Prai,
Penang, Malaysia.

Tel: +604-3907951

Email:
tmsb@tm.texmat.com

SV name: Dr Chai
Yuan Lin (R&D
Assistant Manager)

CONTACT DETAILS

Instruments used

- pH meter
- Viscometer
- Tensile tester
- Wrinkle recovery tester
- Compressor
- Padding machine
- hydrometer



Department of Chemistry UTM
Prof. Dr Razali bin Ismail

Allowance provided



TAN LIN LI
A16SC0277
3 SSCA



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EURO CHEMO-PHARMA
SDN. BHD.

- Incorporated in 1975
- Supplier of a wide range of raw materials
- Achieved ISO 9001 certification in 2003
- Maintain and ensure consistent safety and quality - Integrated Management System

CONTACT:

ADDRESS:

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

TEL: +604-3901941

EMAIL:

marketing@eurochemo.com

SUPERVISOR DETAILS:

Industry: Mr. Eddie Tan
Eng Wah (R&D Manager)
Faculty: Assoc. Prof. Dr.
Razali Ismail

SAMPLING

Prepare samples according to the request of customers.

COLOR MATCHING

Match the color samples from customer with the existing source or production sample.

WHAT I LEARNT

Team working
Communication skills
Multitasking

SAMPLE TESTING

Testing of the samples from customer with the existing source in the food lab.

R&D ACTIVITIES

Create own formulation and prepare samples that will be commercialised as a market product.





Internship @AL Asia Chemical Industry Sdn. Bhd.

Introduction:

AL Asia Chemical was founded on 23rd April, 2009. This company mainly produces adhesives & resins, industrial chemicals and pellet binder for wood industry and fertilizer industry.

Activities in Company:

Quality Control & Quality Assurance (QA/QC)

- Quality Inspection on Raw Materials and Finished Products

Lab Management

- Documentation, Safety Rules & Regulations, 5S in Workplace

Research and Development (R&D)

- Lab Scale Resin Cook, Wetting Agent Test, Model Making using In-House Products

Mini project

- Determination and Verification of the Formulation Product in the Lab Scale Preparation according to JIS A 1469: 2001 and JAS

Socialization in Company

- Jamuan Hari Raya on 13th June, 2019 , Tropical Fruit Festival, Department's Gathering



PREPARED BY:

Ang Hock Tee

imhottea96@gmail.com

Instruments used:

UV-Vis, Viscometer, KJELDAHL

Experience:

- Acquire real working experience and new knowledge on Urea-Formaldehyde Resin.
- Acquire soft skills, working ethics, confidence and ability to work independently.
- Exposed to ISO 9001 & ISO 22000.

Contact Info:

- Plot 348, Lorong Perindustrian Bukit Minyak 22, Penang Science Park, Mukim 13, Seberang Perai Tengah, 14100 Pulau Pinang.
- hr2@alasiachemical.com
- 04-5062023



Conduct Testing

1. Abrasion Test
2. Flexing Test
3. Antistatic Test



Job Scope

1. Develop the rubber formulation (Outsole) & conduct testing.
2. R&D for better performance midsole & outsole rubber.
3. Monitor the quality of the rubber produced in Rubber Compounding area.
4. To assist superior to compile data and analyse the data and carry out some process study.
5. To come out with improvement/ Kaizen plan for shoe production.
6. Sourcing for chemicals needed based on new formulation.
7. To assist superior to perform evaluation and develop new production processes for existing and new products.

Machine Involved:

1. Open Mixing Roll Machine.
2. Moulding Machine
3. Automatic Raw Rubber Bale Cutting Machine
4. Hydraulic Cutting Press Machine
5. Skiving Sewing Machine
6. Two hot & cold counter moulding Machine
7. Strobel Machine
8. Upper Steaming Machine
9. Hydraulic Automatic Rubber Die Cutting Machine



Safetyware
SAFETYWARE GROUP
Responsibility & Care



About me

Name: Nursyaza
Liyana Binti Zaini
No Matric:
A16SC0214
Course: Industrial
Chemistry (SSCC)
Supervisor:
Industry- Chee Mei
Chea
Faculty- Dr Zuhaila
Ismail

Introduction

Safetyware Group – an award winning integrated safety & health solutions provider with over 30 years of experience that provide one-stop OSH products & services. They manufacture safety shoes, safety apparels, rubber gloves, and signage & labels in our manufacturing facilities in Penang

Moulding Outsole



SAFETYWARE SDN BHD
PLOT 237 LENGKOK PERINDUSTRIAN BUKIT MINYAK 3, BUKIT MINYAK
INDUSTRIAL ESTATE 14100 SIMPANG AMPAT, PULAU PINANG.



Yeap Lon Er

3 SSCC

Supervised by:

Industry - Mr. Eddie Tan

Faculty - Assoc. Prof. Dr. Razali Bin Ismail



Safety Data Sheet

Document provides

- useful information on chemicals
- describing the hazards the chemical presents
- composition of the chemical
- giving information on handling, storage and emergency measures in case of an accident.

Job Scope In Euro Chemo-Pharma

Research & Development (R&D) Projects



Sample Preparation



■ Wastewater treatment



■ Organic residue remover



■ Rust remover

■ Burning gel

■ Wood binder

■ Car wax



■ Kitchenware Dirt-off Liquid

■ Hand soap

■ Colour matching



Organization of Laboratory

To tidy up the laboratory





PERAK

LATEXX PARTNERS BERHAD



Products



Types of gloves :

- Latex powdered
- Latex single chlorinated
- Latex polymer coated
- Nitrile (fully and finger textured) in different colours and weights

Faculty supervisors:

Dr. Bakri

Dr. Shazwan

Department of chemistry,

UTM

Industry supervisor:

Nurjasmida Kadir

Manager of Research and Development

Latexx Partners Berhad

Job scope (Research & Development)

1. Create formulation
2. Run lab trials
3. Run trials at production
4. Trouble shooting problems
5. Find solution to problems
6. Do researches to develop the product



Contact information:

Address : Latexx Manufacturing Sdn Bhd,
Lot 18374, Jalan Perusahaan 3, Kamunting Industrial Estate,
34600 Kamunting, Perak.

Tel : (605) 829 5555

Email : career@latexx.com.my

Name : Jeevasonthari Gunasegaran

Matric number : A16SC0073

Course : 3SSCA

TOP GLOVE
TOP QUALITY, TOP EFFICIENCY



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

📍 Top Glove Factory 5, Lot 18, 27, 38& 57, Medan Tasek, Kawasan
Perindustrian Tasek, 31400 Ipoh, Perak
☎️ 05-5466360
Industrial Supervisor: Ms Leow Seow Jia

Ng Wei Wei
SSCA
A16SC0144

Faculty Supervisor:
Dr Mohd Safwan bin
Abd Aziz

About Company:

The world's largest manufacturer of gloves, with manufacturing operations spanning across Malaysia, Thailand and China. Types of products manufactured includes hand protection, sexual wellness, dental care and others such as exercise band

Job Scope:

- Overall Migration Testing on gloves
- Computerized checklist by Excel
- Usage on densitometer in acid and alkaline concentration checking
- Data analysis
- Checking of gloves quality



Experiences:

- Learn on how a QA department works
- Learn about different types of gloves & types of defect in gloves
- How to insert formulas in Excel to auto generate data
- Use FOSS RRIMeter instrument to test for latex samples
- Use a light weight density meter, known as densitometer to check for specific gravity of samples



42

FACTORIES

682

PRODUCTION LINES

18,000

EMPLOYEES

63.9

BILLION GLOVES PER ANNUM



Tan Hooi Ping
3SSCA

sherry0312@live.com



Faculty Supervisor
Dr. Mohd Bakri Bin Bakar



Organization Supervisor
Ms. Goh Seok Hooi



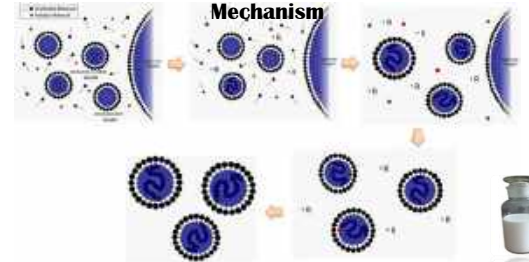
Description of Training

Emulsion Polymerization Technique



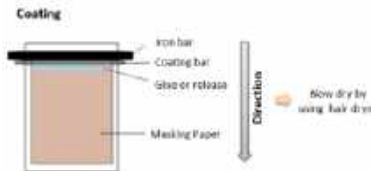
Schematic Representation of Emulsion Polymerization Process

Emulsion Polymerization Mechanism



Schematic Representation for the Mechanism of Emulsion Polymerization

Quality Control Tests



Total Solid Content Test



Paper Moisture Test



Viscosity Test

Way 1: Zahn Cup Test



Way 2: Viscometer



Adhesion Test

Reset the reading of material testing machine to zero

Perform measurement and record the reading

Fill about 0.5cm at the tip of masking paper

Clip the folded masking paper

Length, Thickness & Diameter Test of Paper Core



Contamination Test



Paper Thickness Test



Specify Gravity Test



Mechanical Stability Test



LIH MEI INDUSTRIAL SDN BHD
HEADQUARTER & SALES CENTER
PLOT 4180, JALAN PERUSAHAAN 3,
KAMUNTING INDUSTRIAL ESTATE,
34600 KAMUNTING, TAIPING,
PERAK, MALAYSIA.

Tel : +605-891 2482
Fax : +605-891 2804
Email : lihmei@lihmei.com
Website : <http://www.lihmei.com.my>



ABOUT COMPANY

A trusted and reliable PVC compound manufacturer

Address: 16, Jalan Kilang 1, Jelapang Light Industrial Estate, 30100 Ipoh, Perak.

TESTING CONDUCTED



Melt Flow Test



Environmental Stress Crack Test



Fire Propagation Test



Hardness Test



Density Test



Discolouration Test



Peel Test



Tensile Elongation Test



Linear Thermal Expansion Test



Measuring Colour Using Sphere Spectrophotometer

Company Overview

Hovid (formerly known as Ho Yan Hor) is Malaysia's leading pharmaceutical manufacturers of high quality and innovative medicinal preparations and health supplements with more than 400 products distributed over 50 countries globally.

JOB SCOPE

- Involved in method development process such as preparing protocol, sample and standard.
- Involved in method validation such as doing method validation report
- Carry out physical testing and calculation for results

QUALITY CONTROL (CHEMOR)

- Comply with WHO's Good Manufacturing Practice (cGMP) & Good Laboratory Practice (GLP),
- laboratories accredited under ISO/IEC17025:200

Instrument Available

- HPLC
- UPLC
- GC
- ICP
- FTIR
- UV-VIS

MICROLAB

PRODUCTION

RESEARCH AND DEVELOPMENT

INDUSTRIAL TRAINING

hovid

Continuous Innovation & Quality



Intern
Name: Tan Yee Minh

Supervisor
Name: Madam See Lee Lan
Tel No: 018-4016233

Address: Lot 56442, 7 1/2 Mile,
Jalan Ipoh/Chemor, 31200
Chemor, Perak.
Tel No: 605.506.0690



A Member of MNC Group

ALIRAN AIR UTARA SDN. BHD.

AIRB has involved in both Industrial and Municipal Water Treatment Industry.



Contacts

Address: Aliran Air Utara Sdn Bhd
Loji Air Gunung Semanggol, Kampung
Gunong Semanggol, 34400 Simpang
Empat Semanggol, Perak

Tel: 03-228 00 493

Fax: +6 03 228 00 494

Email: info@airb.com.my



Job Scope

- | | |
|-------------------------------|--------------------------|
| 1. pH test | 6. Chlorine test |
| 2. Turbidity test | 7. Aluminum test |
| 3. Color test | 8. Iron test |
| 4. Conductivity test | 9. Fluoride test |
| 5. Total dissolved solid test | 10. Verification reports |



Supervisor Details

Industry: Puan Nur Maziah binti Ahmad Zaki (Quality Chemist)

Faculty: DR. Mohd Bakri bin Bakar



About me

Name: Wan Amira Syahirah binti Mohd Ariff

No. Matric: A165C0292

Course: 3SSCC



Experiences

1. Safety Training
2. Chlorine Drill
3. Decision-making skill based on critical thinking, improved communication and got to work with a hardworking and helpful teamwork



Instruments



Turbidimeter



Direct Reading Spectrophotometer



Conductivity Meter



pH Meter



Colour Comparator



Color Disk



SELANGOR



TOP GLOVE

TOP QUALITY, TOP EFFICIENCY

INTRODUCTION

Factory F13P is one of the non-glove factories in Top Glove. This factory is mainly producing the ceramic hand called Former. The Former then send to all glove producing factory for further process.

EXPERIENCE

- Experienced to see the real process of dipping glove in F22.
- See and use a few of scientific instrument in F25 and F13P TGCRC
- Revise and Implement standards.

DEPARTMENT

My role in the F13P factory is a trainee in production. But mostly the job scope is R&D. For the first 3 weeks, I am in the production department and in R&D department for the rest of the weeks.



[left] Mr. Puah Kean Seng
(Manufacturing Manager)
[right] Mr. Everson Chin Kwong Kit
(Engineer , R&D)

INSTRUMENTS



ELECTRONIC MICROSCOPE



SERVO CUTTER



PARTICLE SIZE ANALYZER



DIGITAL VISCOMETER



Allowence : 1k
Enviroment : Dusty (need to wear mask all the time)
Overall : Good and Recommended
Comment :
Friendly, helpful colleague and fun enviroment.

KOSSAN GROUP - WEAR SAFE (M) SDN BHD

KOSSAN

STRETCHING LIMITS • SINCE 1979



Main Laboratory Department

JOB SCOPE

In coming chemical inspection
Tensile testing and management
Latex testing
Powder testing
Protein testing

NAME: AINA SYAHIRA BINTI ROSLI
MATRIC NO: A16SC0006
DEPARTMENT: MAIN LABORATORY
FACULTY SV: MR.HASHIM BIN BAHARIN
INDUSTRIAL SV: THAM SENG TIAN

INTRODUCTION

Kossan Rubber Industries Bhd manufactures industrial rubber products and disposable latex gloves. The firm has three primary businesses; technical rubber products, gloves and cleanroom products. More than 80% of Kossan total production capacity is sold to developed nations in the US, Euro Zone, Japan and Korea.

LESSON LEARNT

Throughout my internship, I have learnt many things that requires technical skills. I get to learn how to test for chemical inspection. I also learn all sort of testing in the lab and thanks to supervision by my coworkers, I manage to test on my own. Since Kossan is a huge manufacturer, we are so busy to follow with customer expectation. Thus, working here teaches me how to manage my time properly and able to work under pressure.

COMPANY DETAILS:

CONTACT: +603 3291 2657

EMAIL: kossan@kossan.com.my

INSTRUMENT USED



Chemical Testing



Powder level testing



Microplate Absorbance



Tensile test



SIME DARBY RESEARCH SDN BHD, CAREY ISLAND

Sime Darby Plantation is the largest producer of Malaysian Sustainable Palm Oil (MSPO) and the parent company of Sime Darby Research Sdn Bhd. Research and development department holding an important responsibility towards developing, applying and transferring relevant knowledge, research findings and technologies to improve their plantation yields, milling processes and customise their downstream products. I was appointed to Plant Product Laboratory that are managed under Lab Services Department.

CONTACT DETAILS

Supervisor

Name: Ahmad Sarwani Adni
Telephone No: +603 3326 6900

Apply Through

Email to:
nurlila.samad@simedarbyplantation.com
Telephone No: +603 3120 2311 ext 299

INTERNSHIP JOURNEY

MUHAMMAD AMIRUL SOLIHIN BIN MAZLAN 3 SSCA A16SC0315

MINI PROJECT: FINDING OPTIMUM PARAMETERS TO OBTAIN THE GREATEST YIELD OF OIL EXTRACTED FROM OIL PALM LEAVES WHILE MAINTAINING THEIR NUTRIENT CONTENTS



SOXHLET EXTRACTION

- As the set up for time changing parameter, Soxhlet ran for 2Hr, 4Hr, 6Hr and 8Hr.
- For sample size and temperature as the change parameter, the Soxhlet undergo 6 Hours of extraction.



ROTARY EVAPORATOR

- Separation of Hexane (solvent).



NITROGEN EVAPORATOR

- Separation of Hexane (solvent).



DRYING

- Till constant weight is obtained.

FINDINGS



OTHER ACTIVITY



Handling NIR Spectroscopy

- Excellent tool for quantitative analysis, offering a practical alternative to time-consuming wet chemical methods and liquid chromatographic techniques.

EXPERIENCE



- Working in organizational
- Enjoying company activities and making connections with staffs.
- Learned to plan systematically to all the assigned works.
- Exposed to method used in plant analysis.



SIME DARBY RESEARCH SDN BHD R&D CENTRE CAREY ISLAND

Food Safety Laboratory

About Company



Sime Darby Plantation is the largest producer of Malaysian Sustainable Palm Oil (MSPO) and the parent company of Sime Darby Research Sdn Bhd. Sime Darby Plantation is the world's largest palm oil plantation company by planted area. The company produces approximately 2.48 million tonnes or four per cent of the world's crude palm oil (CPO) output annually, of which about 98% or 2.43 million tonnes are Certified Sustainable Palm Oil (CSPO). Here, they committed towards developing, applying and transferring relevant knowledge, research findings and technologies to improve the plantation yields, milling processes and customize the downstream products. I was assigned to Food Safety Lab that was managed under lab services department.



MUHAMMAD ASRAF BIN
AHMAD ZAHIDI
3SSCA

THINGS LEARNED

- Hands-on practice on handling instruments with the correct ways and used.
- Exposed to the method used for testing.
- Know the Lab management system and software used for each analysis.
- Explored on the production of oil and other products produced

JOB TRAINING SCOPE

- Analysis of Glyphosate in Pure Poison
- Analysis of Paraquat in Edible Oil
- Analysis of Organochlorines compound in water.
- Analysis of RSPO in water.
- Analysis of Mineral Oil Hydrocarbon(MOH) in Edible Oil.
- Analysis of Cypermethrin in Pure Poison.

MINI PROJECT

Study on contaminations of Mineral Oil Hydrocarbon (MOH) in inner and outer layer of fresh fruit bunch (FFB).



INSTRUMENTATION



CONTACT DETAILS

T: +(603) 33266895

E: maizatul.putri@sime-darbyplantation.com

Background Company

Agri Asia Global is one of the leading palm oil processor of refined and fractionated vegetable oils and fats for industries globally. Agri Asia Group engages all aspects throughout the processing chain, from sourcing and processing raw materials, marketing, R&D, merchandising, packing, shipping and distribution of products.



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



Experiences

- Learn to prepare sodium hydroxide (NaOH) solution.
- Gain a lot of knowledge about oils and their process
- Learn the procedure of testing every type of oils
- Handling instruments

Job scope- Routine analysis of oils
Parameters for analysis: Iodine Value, Peroxide Value, Colour, Moisture & Impurities, Slip Melting Point and Cloud Point
Parameters for packaging material: Length, width, weight, artwork etc.



Contact: Agri Asia Refinery Sdn Bhd

No. 2258, Jalan Helang, Kampung

Batu 9, 42500, Telok Panglima

Garang, Selangor, Malaysia.

Tel: + 603 3122 2100

Fax: + 603 3122 2343

Faculty's supervisor: En Hashim Baharin
Industrial's supervisor: Puan Syahrma Makhtar
Student's name: Nur Atiqah Mat Hasan (3SSCA)





Company Profile

SGS is the world's leading inspection, verification, testing and certification company.

Personal Profile

During my training, I was assigned to be in General Chemical Food Department, supervised by Felicia Ng Yee Chian and carried out testing for food samples such as Fat, Protein, Sugar, TDF and moisture.



What I've Learnt

01

Fat

- Soxhlet extraction
- Acid hydrolysis
- Alkaline hydrolysis



02

Protein

- Kjeldahl method



03

Sugar

- Lane-Eynon method



04

Quality Control

1. Blank • Ensure no contamination
2. Duplicate • %RSD < %RSD horwitz
3. Reference Material • Control Chart



AGENSI NUKLEAR MALAYSIA

Nuclear Technology Propels The National Vision

Leading nuclear research and development(R&D) organization in the field of nuclear science and technology in Malaysia that continues to play an active role and contributes to the implementation and achievement of national science and technology policies, to ensure this agency remains relevant



ABOUT ME

NUR FATINI BT SAMSULKAHAR
3SSCC
CHEMISTRY DEPARTMENT

FACULTY SUPERVISOR



PM DR WAN MUHAMMAD SARIDAN
BIN WAN HASSAN
PHYSICS DEPARTMENT



INDUSTRIAL SUPERVISOR

ENCIK NORFAIZAL BIN MOHAMED@MUHAMMAD
RESEARCH OFFICER
RAS GROUP
DR ZAL U'UYUN WAN MAHMOOD
MANAGER
RAS GROUP

INTRODUCTION

Radiochemistry and Environment Laboratory (RAS). The laboratory was established in 1984. The radioanalytical services are provided for government and commercial needs.

JOB SCOPE

Radiochemical analysis is mainly performed for alpha, beta and gamma emitting radionuclides in wide range of matrices such as: soil, sediment, sludge, water, food, smear test, fauna and flora

INSTRUMENTAL

RADIOCHEMISTRY AND ENVIRONMENT (RAS)

PROJECT

Method Validation in Determination of gross alpha beta in water sample

OBJECTIVE

- To determine activity of gross alpha beta by using difference volume of water sample
- To study relationship between the average weight residue with Volume of sample used.
- To study and compare the result of gross alpha beta activity using between microsoft excel and software



Gamma spectrometry system



Alpha spectrometry system



Low Background gross alphabeta counting system



Liquid scintillation counter

COMPANY ADDRESS AND CONTACT



MALAYSIAN NUCLEAR AGENCY,
43000 KAJANG, BANGI
SELANGOR DARUL EHSAN

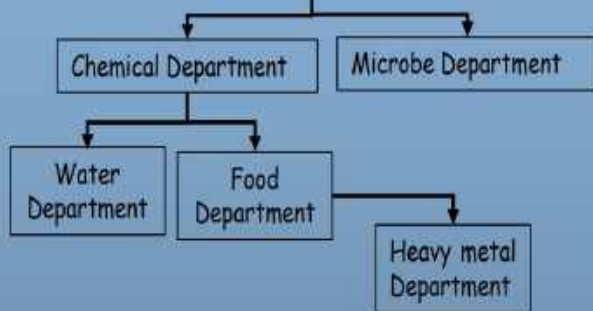


TEL : 03-8911 2000
FAX : 03-8911 2153



Connie Leong Ying Fang
(A16SC0040)

As trainee in Water Department at Acumen Scientific Sdn Bhd (Subang Jaya Branch)



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



+603-56345618



FACULTY

P.M. Dr Amiruddin Shaari

Supervisor



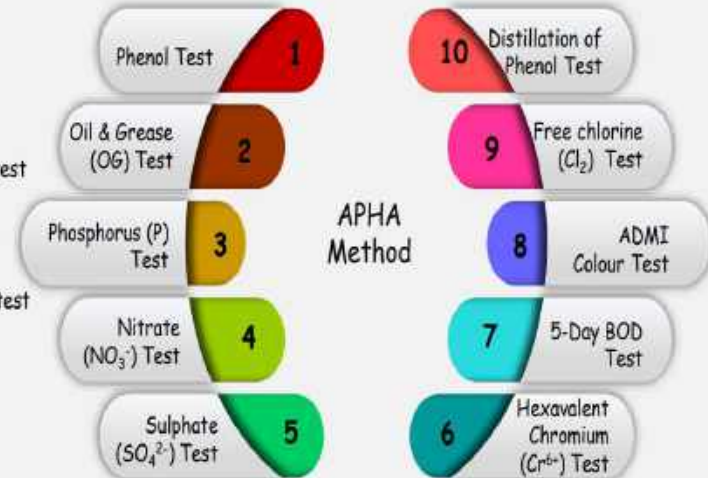
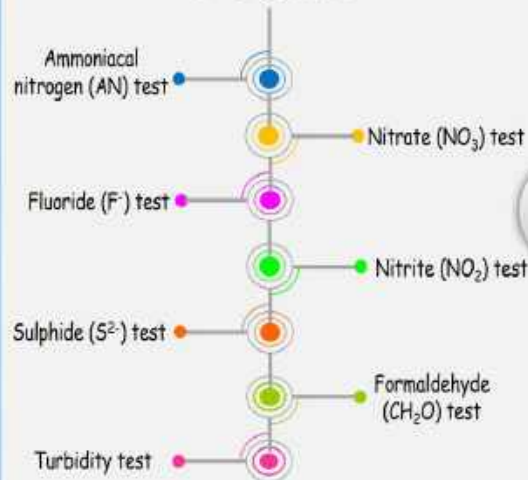
INDUSTRY

Miss Cheng Pui Wah

JOB SCOPE

Conduct tests on different water quality parameters according to international test method (APHA & HACH) that involved analytical instruments UV spectrophotometer, Dissolved oxygen meter & etc.

HACH Method



INSTRUMENTS



Portable Turbidimeter 2100Q



UV VIS spectrophotometer DR6000



Bench Top Dissolved Oxygen Meter YSI5000



Bench Top pH Meter BP3001





→ AMOS

TRACK ALL OF THE AIRCRAFTS OWNED BY THE COMPANY

- 1. MANUALS MADE BY ENGINEERS
- 2. MAINTANACE SCHEDULE
- 3. AIRCRAFTS STATUS



CONNECTED TO AMOS

- USED FOR:
- 1. COLLECT DATA FROM AMOS
 - 2. DEVELOP THE DATA
 - 3. CONTAIN A LOT OF STATISTIC FEATURE

← SKYWISE ←



→ AIRBUSWORLD

CONTAIN ORIGINAL MANUALS MADE BY THE AUTHORITIES WHO MANUFACTURED AND SELL AIRBUS TO AIRASIA

- USED FOR:
- 1. TO SEARCH FOR THE ORIGINAL MANUALS OR REFERENCE WHENEVER AN AIRCRAFT NEED TO UNDEGO A MAINTANANCE



JOB SCOPE AND SOFTWARE USED

AirAsia

ENVIRONMENT AND EVENTS



This is AirAsia's corporate HQ in Malaysia, situated adjacent to klia2 terminal, that house up to 2,000 AirAsia Allstars (staff). The name RedQ, representing RedQuarters was selected, as it echoes the dynamism and spirit of the company and its workforce in making AirAsia a resilient and successful airline.

A LOT OF EVENTS WAS ALSO HELD THRU OUT MY INTERNSHIP AND SINCE THE OFFICE'S CONCEPT IS AN OPEN WORKING SPACE SO MOST OF US HAS TO PARTICIPATE IN ALL OF THOSE EVENTS.



TUN MAHATHIR, MALAYSIA PRIME MINISTER VISIT TO REDQ



RAYA CELEBRATION



AIRASIA SAFETY DAY WHERE GAMES AND TALKS ABOUT SAFETINESS IN AVIATION INDUSTRY ARE HELD



The building was designed with Allstars in mind, prioritising cool spaces for Allstars to meet, mingle and get their creative juices flowing.



INTRODUCTION



NURFARHANA SHUKRI
3SSCC
INDUSTRIAL TRAINING
ALUMAC INDUSTRIES SDN BHD

ALUMAC BACKGROUND



Alumac Industries Sdn. Bhd. was established in October, 1994. It has set the foresight to become one of the major Aluminium Extrusion Supplier in the industry area. This company has provided a wide range of aluminium extrusion part and aluminium extrusion profile including geometrical profiles, architectural profiles, heat sink profile, customized profile and anodizing profiles.

DETAILS

Lot 8463, Kampung Jaya,
Industrial Area, 47000 Sungai
Buluh, Selangor
03-6156 9457
www.alumac-aluminium.com
hr2@alumac.com



INDUSTRIAL SUPERVISOR

MS. LIM LEE LEE
PLANNING MANAGER
ALUMAC INDUSTRIES SDN BHD

FACULTY SUPERVISOR

DR. FAZILAH ABD. MANAN
SENIOR LECTURER
DEPARTMENT OF BOISCIENCES

LESSON LEARNT



- Obtain insights on the aluminium extrusion industry
- Process involved in aluminium extrusion
- Exposed to the real working environment
- Be independent & adaptable.
- Develop interpersonal skills from active involvement in the company
- Problem solving skills
- Communication skills

INTERNSHIP JOURNEY TIMELINE



PLANNING DEPARTMENT

CONTROLLING PRODUCTION SYSTEM

- Collect & Check Lot Tickets (orders)
- Check daily extrusion log sheet & extrusion efficiency
- Update technical information in production system
- Scheduling anodizing process

TOOLS & DIE DEPARTMENT

EXPERIMENT ON DIE WASHING PROCESS

Investigate the concentration of NaOH solution practiced by Alumac to wash the dies and the duration of the die washing process.



EXTRUSION DEPARTMENT

TEST AND MONITOR NEW SYSTEM

- Test billet stock system referring to billet requisition form and billet cutter form
- Monitor ageing oven written records and ageing waiting list in production system

ANODIZING DEPARTMENT

ANODIZING LABORATORY

Standard Operating Procedure (SOP) on aluminium content test, jar test for waste water treatment and dilution process of sample.

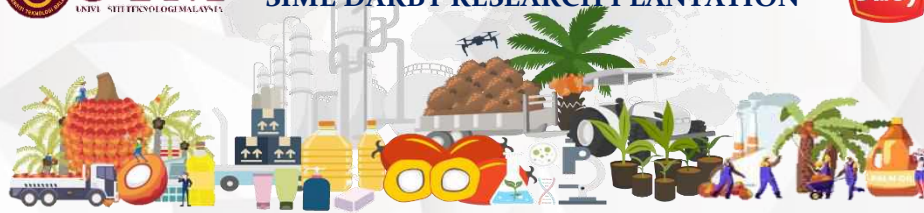


CARING GAMES

CONDUCTED BY INTERNS FOR PRODUCTION WORKERS

- Manufacturing
- The Balloon Order

Games were made to develop leadership skills within production workers and strengthen team working



PROJECT

"A STUDY ON FACTORS AFFECTING AUTOCATALYTIC HYDROLYSIS OF CRUDE PALM OIL"



PROBLEM STATEMENT

Autocatalytic hydrolysis is a matter that needs to be controlled in order to get a good quality of palm oil. Few factors affecting autocatalytic hydrolysis such as moisture, temperature, initial FFA, mixing time (duration CPO exposure to moisture) and mixing speed (surface contact CPO to moisture) are believed could affect the FFA level of the CPO.

COMPANY BACKGROUND

Oil palm plantation company accounting ~ 4% of total global production of Crude Palm Oil (CPO)

Focus on operational excellence, research, innovation and sustainability

OBJECTIVE



To study the effect of the factors affecting autocatalytic hydrolysis on FFA conversion.

JOB SCOPE



Literature review on autocatalytic hydrolysis

Competency evaluation on FFA analysis by Head of P&E Department

Study the effect of parameters: moisture, temperature, initial FFA, mixing time and speed on FFA conversion

ADDRESS & CONTACT

SIME DARBY RESEARCH SDN. BHD
R&D Carey Island, Chemara Building, Lot 2664, Jalan Pulau Carey, 42960, Carey Island, Selangor

T : 03-3120 2311
F : 03-3120 1197

PREPARED BY

Nurul Izzaty binti Ramly (A16SC0334) (3SSCC)

METHODOLOGY



FFA ANALYSIS

THINGS LEARNED



Analytical thinking

Time management



Safety first!

Presentation skill





KUALA LUMPUR

INTRODUCTION



Shin-Etsu Handotai (S.E.H.) Malaysia Sdn Bhd. is one of Shin-Etsu Chemical Co., Ltd. as the group's parent company, has been supplying high quality silicon wafers exhilarating demand of the semiconductor industry since 1973. S.E.H. Malaysia has emerged as the largest single wafer processing plant in terms of capacity in the world with a processing plant capable of producing high quality polished silicon wafers.

As the emerging of semiconductor market, S.E.H. Malaysia has invested in an 8-inch diameter wafer production facility in Shah Alam, Selangor in 1994 in order to meet growing demand. With this facility, S.E.H. Malaysia will maintains its position as the largest silicon wafer production facility within the Shin-Etsu Handotai Group and undisputedly in the world.

MINI PROJECT

PROCESS FLOW QUALITY PLAN FOR CVD01 AND CVD02 MACHINE



Prepare Standard Operating Procedure (SOP) by using CVD01 and CVD02 machine and process flow of silicon wafer.

Prepared by: Russuhadah Binti Ibrahim (3SSCC)

TRAINING SCOPE

- Meeting with Hirata-san about 25 pcs project
- Safety meeting and inspection every month
- Join Audit meeting with HQ
- Machine status
- Chemical Vapor Deposition (CVD) and Nodule area.

COMPANY DETAILS

SEH (M) SDN BHD
Lot 2 Lorong Enggang,
Ulu Klang Free Trade
Zone,
54007, Kuala Lumpur

HR Internship: Ms Shahlini
Email: shahlini@sehmy.com
Tel: 03-42596600

FORENSIC LABORATORY, PDRM, CHERAS



OBJECTIVES :

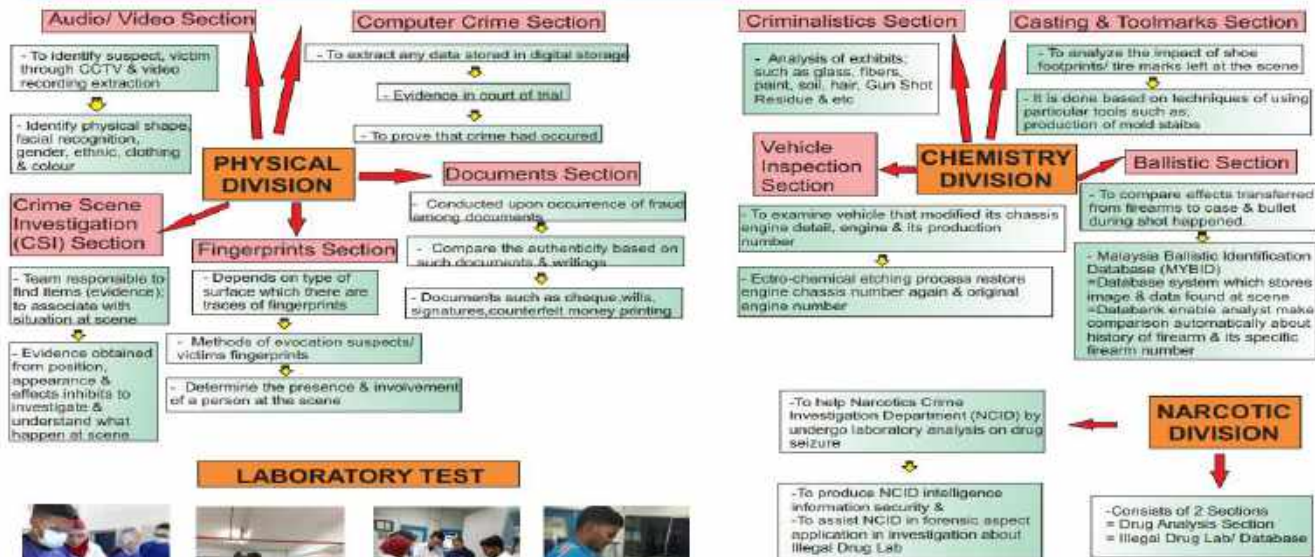
- # To perform forensics investigation & analysis in as may criminal cases
- # Establishment & administration of database such as forensics narcotic database & ballistic databases
- # To promote utilization of current forensics knowledge through training

VISION :

- # To provide an integrated forensic service committed to quality, integrity & accountability, to the police, justice system & community

MISSION :

- # To provide scientific assistance in criminal investigation so that it can be carried out in professional manner



Industrial Training Poster (SSCU 3905) Short Semester 2018/2019

Hariharan A/L Panirselvan
A16SC0062
3SSCC
019-3638398 (hp)

Faculty Supervisor:
Dr Norahim Bin Ibrahim

Organization Supervisor:
Supt Nor Azman Bin Mohd Noor

via Natura was founded in November 1993 to offer specialised professional and scientific consulting services in land use planning and environmental conservation. via Natura provides planning, design and management solutions to clients to achieve the highest environmental quality standards.

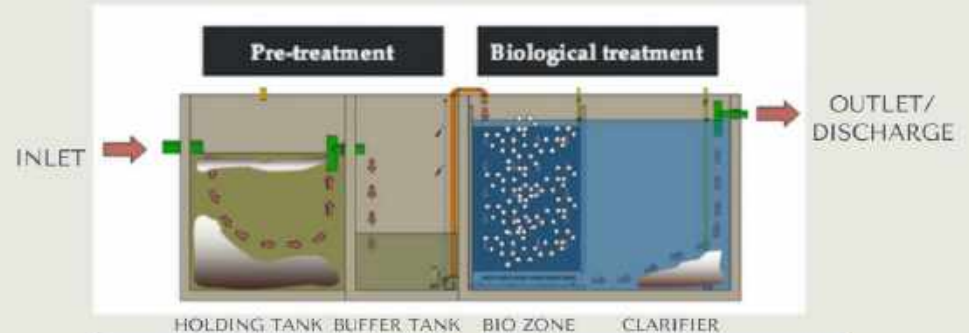
via Natura has now expanded its services in providing eco-friendly solutions in wastewater treatment, recycling, and clean water supply. We are an agent for BioKube biological wastewater treatment and recycling in Malaysia.

The company's business involves providing the following wide-ranging but interrelated scientific and professional consultancy service. Also, provide solutions for clean water supply, waste water treatment (agency of BioKube) and water recycling.



Company Background

Communal Septic Tank



The raw wastewater gravitates to the holding tank in which the settleable suspended solids are settled preparing the wastewater for further treatment.

The wastewater then gravitates from Holding Tank into the Buffer Tank which has a sewage pump to even out sewage inflow fluctuations and stabilises the cleaning process to the BioKube biological treatment zone.

The biologically-treated water is then led through a clarifier, where it moves very slowly and any dead bacteria (bio-sludge) will settle at the bottom of the tank. The bio-sludge gets airlifted back to the Holding Tank by the means of air lift pumps.

In the biozone, microorganisms perform degradation of the organic load in the incoming wastewater to the required levels. The chamber consists of submerged aerated filter.

EXPERIENCES

- Able to learn how to treat waste water by BioKube technology
- Able to explore and experience on real life of working environment
- Has visited BioKube unit of Pluto, Jupiter and Mars 3000 located at Penang Hill and Damansara



MALACCA





ISO 9001:2015



9001:2015

5S audit



Inspections





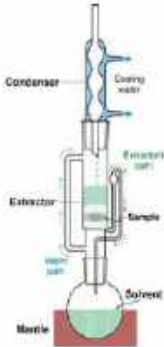
- ❖ Tan Jia Yi
- ❖ 3SSCA
- ❖ elainetan821@gmail.com
- ❖ Faculty Supervisor:
Prof. Dr. Mustaffa Bin Shamsuddin
- ❖ Industry Supervisor:
Norhayati Binti Bashah



Soxhlet Extraction

Basic Principles:

Extraction solvent boils -> condensed by condenser -> solvent filled the thimble with sample -> full -> siphon back to the organic solvent -> process repeated





Titration of oil



To determine the Free fatty acid value

Titrate until light pink is observed



0.1M Sodium hydroxide

20g oil + phenolphthalein + ethanol



Membrane peel-off study

Kilang Makanan MAMEE Sdn Bhd
Lot 1, Air Keroh Industrial Estate, Air Keroh, 75450 Ayer Keroh Melaka.
Tel: 06-2324466
Fax: 06-2326744



INTRODUCTION



My industrial training was completed at Kotra Pharma (M) Sdn. Bhd. in R&D department. I was placed in analytical group which divided into five team which is raw material, routine, stability, analytical method development and validation. I have been exposed to several testing in order to increase my skill and knowledge. Every testing should be done by depending on some parameters.

WHAT I HAD LEARNT?



Hands-on practice



Team Work



Exposed to the lab management system



Hardworking



TRAINING SCOPE

- Dissolution testing for tablet/capsule/suspension sample by **HPLC** and **UV-Vis Spectrophotometry**.
- Preparation of **mobile phase/ standard solution / sample solution**.
- **Standardization** of solution.
- Assist analyst for **assay and related substances testing** by **HPLC**.
- **Assay testing** by **manual** and **auto-titration**

MEMORISABLE MOMENTS

Kotra Raya Celebration



Faculty Supervisor visit

INSTRUMENTATION

HPLC



Weighing Balance



Dissolution Tester



Titration



UV-Vis Spectrophotometry



CONTACT

HR No. Phone :
06- 3362 222

hrintern@kotrapharma.com

Integrated Management System (IMS)
Quality Management System
ISO 9001:2015
Environmental Management System
ISO 14001:2015
Occupational Safety & Health Management System
OHSAS 18001:2007
Information Security Management System
ISO/IEC 27001:2005

Plant Details
 2 x GE Frame 9E
 Gas Turbine
 2 x Nooter Erikson Heat Recovery Steam Generator
 1 x GE Steam Turbine
 Natural Gas + Fuel Oil
 Combined Cycle Power Plant
 Total Base load 330 MW

Balance of Plants
 Water Treatment Plant (WTP)
 Electro Chlorination Plant (ECP)
 Emergency Diesel Generator
 Closed Cycle Cooling Water System
 Circulating Water System
 Fire Fighting System
 1 x 5,000 m³ Distillate Tank
 1 x 5,000 m³ Demin. Water Tank
 Raw Water Tank

Chemical Services in the Plant
 Daily Water Consumption Monitoring
 Daily Routine Analysis
 Continuous Emission Monitoring System (CEMS)
 Water Discharging Monitoring
 Annual Environmental Air & Stack Emission Monitoring
 Annual Noise Boundaries & Chemical Exposure Monitoring
 Acid Cleaning ECP
 Scheduled Waste Disposal

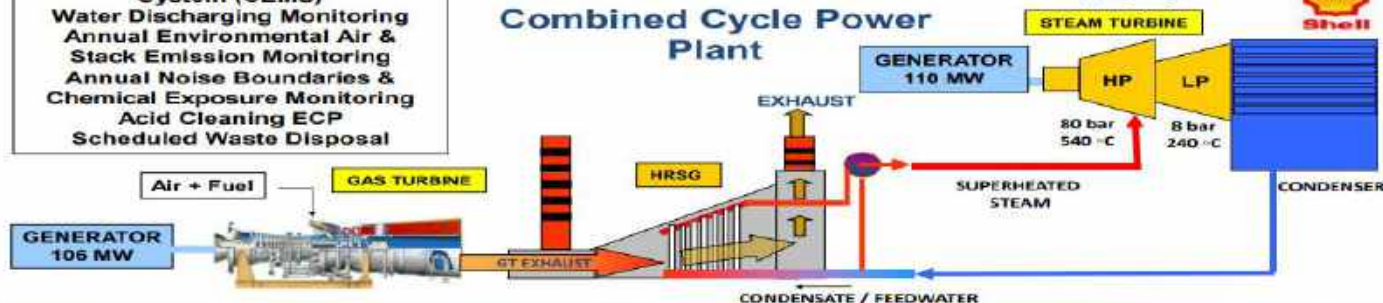
EDRA
中广核 CGN
PAHLAWAN POWER SDN BHD
TANJONG KLING POWER STATION

Power Purchase Agreement

Gas Supply Agreement

Fuel Supply Agreement


Combined Cycle Power Plant



Structure of Organization



Trainee:
 Nur Ezzati binti Muridon
 3 SSCA

Industrial Supervisor:
 Encik Rozi bin Idris
 Senior Chemist @ Chemical Services Executive

Faculty Supervisor:
 Prof Dr Mustaffa bin Shamsudin

Allowance: YES

Address of Organization

Edra Power Holdings Sdn Bhd
 Pahlawan Power Sdn Bhd
 Tanjung Kling Power Station
 Tanjung Kling 76400 Melaka

Contact of Organization

Telephone No. : 03-23020800
 Fax No. : 03-23816677

Personal Information

- Name: Karen Tay Sze Jie
- Year/Course: 3 Year in Bachelor of Science (Chemistry)

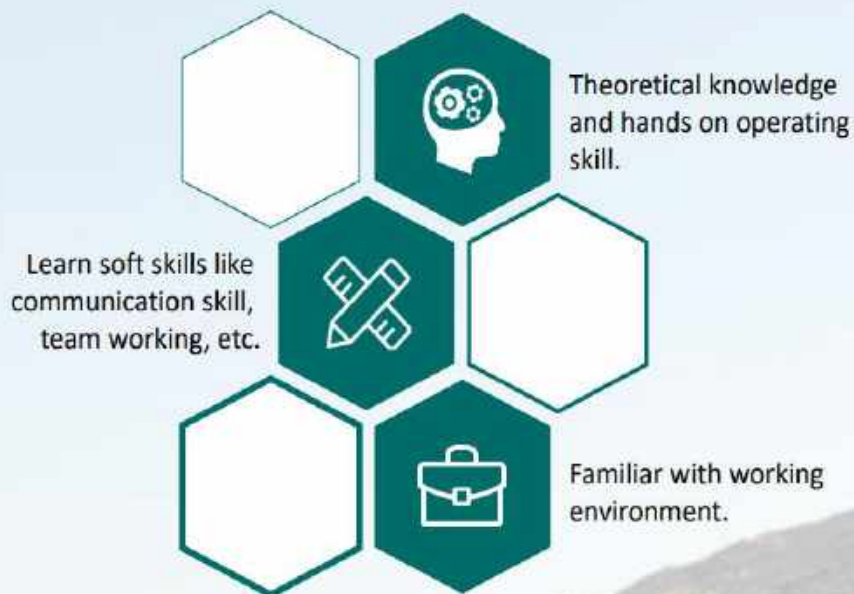
Organization Supervisor

Mr. Henry Khor Hong Hwa
(Innovation & Development
Department Chemist)

Faculty Supervisor

Prof. Dr. Mustaffa Bin Shamsudin
(Lecturer of Chemistry Department,
Faculty Science)

Experience Gained



Instruments Handled



HPLC



Dissolution Tester



UV-Vis Spectrophotometer



FTIR



MALAYSIAN REFINING COMPANY SDN. BHD.



Student Name

NUR SYAZWIENA

Course

3SSCC

Matrik No.

A16SC0197

ABOUT:

(MRC SB)
BANGUNAN PENTADBIRAN SUNGAI
UDANG,
PERSIARAN PENAPISAN, 76300
SUNGAI UDANG, MELAKA.
- GROUP PROCUREMENT & PD&T,
SUPPLY CHAIN MANAGEMENT



INDUSTRIAL SUPERVISOR:

Pn. Siti Salwa Bt Abas
Manager (Sourcing), Group
Procurement, MRC SB.

FACULTY SUPERVISOR:

Prof. Dr. Mustaffa Shamsuddin



MAJOR TASK ASSIGNED:

- Procurement activities such as Tender Plan, Request for Quotation (RFQ), Technical Evaluation Report, Techno-Commercial Report, Award Recommendation Report and issuance of Purchase Order.
- Proactively negotiate price proposals with vendors and successfully achieved cost savings for the company.
- Involved in regular checking on the status of Purchase Order.

THINGS I LEARNT:

- Always ask question once the offers come to you.
- Absorb everything possible. Read what's in front of you and use your mind.
- Never compare your own plate, to others.





JOHOR





MICROVIT SDN BHD

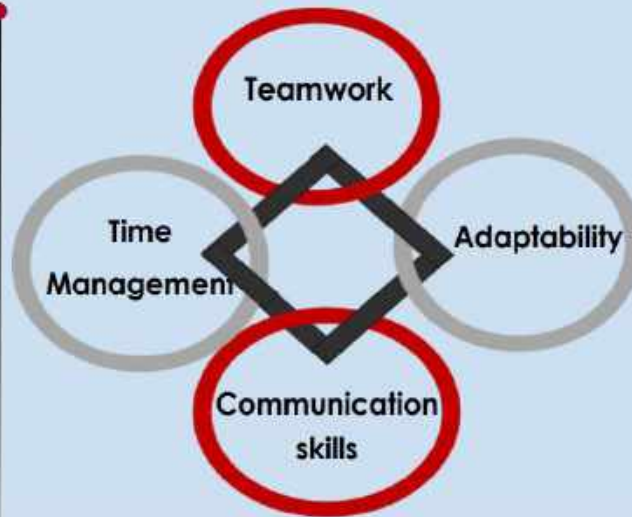
No 33 Jalan Mega 1/4, Taman Perindustrian Nusa Cemerlang, 81550
Gelang Patah, Johor

Microvit Sdn Bhd is a CNC precision machining manufacturer managed and lead by a team of experienced and highly dedicated management team, engineers coupled with an efficient and skilful workforce. Microvit is fully committed to provide quality products at a competitive price and on time delivery for all of our customers.

TRAINING SCOPE

- Carried out inspection of parts by using various instruments.
- CMM probe calibration process.
- CMM inspection programming.

THINGS LEARNED



INDUSTRIAL SUPERVISOR :

Ms. Siti Nazihah binti Ahmad
(Quality Management Representative)

INSTRUMENTATION



Coordinate measuring machine (CMM)



Smart scope



Roughness tester

FACULTY SUPERVISORS :

Dr. Hasmerya binti Maarof
Dr. Rohul Hayat bin Adnan

Maisarah Azad binti
Khayruzamri
3SSCA

INTRODUCTION

SW Rubber (M) Sdn Bhd is a manufacturing company which produces rubber and silicone components. SW Rubber (M) Sdn Bhd is under Sei Woo group of companies which has two more production factories in Singapore and Austria. The sales office are located in USA and South Korea.



INSTRUMENTS USED

- Moving Die Rheometer
- Tensile Tester
- Hardness Tester
- OGP SmartScope
- Compression Molding
- Two Roll Mill



Mr Daniel Bala
Production Process Manager



Dr Hasmerya bt Maarof
Dr Rohul Hayat bin Adnan

Department of Chemistry UTM



www.seiwoo.com



+07-5959188

ALLOWANCE PROVIDED !!

LESSONS GAINED

Team Work

Technical Skills

Time Management

Communication Skills

JOB / TRAINING SCOPE

- Chemical oxygen demand
- Bio-chemical oxygen demand
- Ph, TDS, AAS, UV-vis
- Turbidity
- Oil and Grease
- Suspended solid
- Total nitrogen & more



its WATER & ENVIRONMENTAL

ABOUT

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.



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.



HOW TO CONTACT

ENVILAB SDN BHD, NO. 28B, JALAN PINGAI, TAMAN PELANGI, 80400 JOHOR BAHRU, JOHOR, MALAYSIA
+06 3 57409088
info@its-envilab.com

STUDENT'S PROFILE

Nurul Aqilah Binti Rosli
A16SC0307





UTM
UNIVERSITI TEKNOLOGI MALAYSIA

its WATER & ENVIRONMENTAL

Introduction

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



Testing available:

- ✓ pH and TDS
- ✓ Oil and grease
- ✓ Suspended solid
- ✓ Total Solid
- ✓ UV (boron, phenol, nitrate, etc)
- ✓ AAS
- ✓ Biochemical Oxygen Demand (BOD)
- ✓ Chemical Oxygen Demand (COD)
- ✓ Ammoniac Nitrogen

Personal

information:

Name: Nurul Ain Binti Saadon
Matric Nr: A16SC0306
Course: SSCA



Industry supervisor:

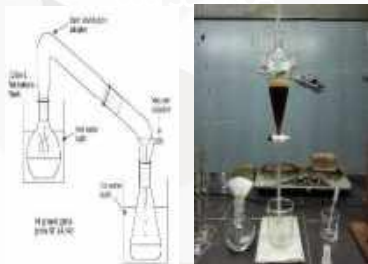
Ms Voon Wan Sin

Faculty Supervisor:

PMDr See Hong Heng
Dr Mohd Fuad Bin Mohamed

About Company:

Address: Envilab Sdn Bhd
38, Jln Pingai, Trm
Pelangi, 80400, Johor
Bahru
Contact: +60 7 332 6277
Email: jbe@its-envilab.com





COMPANY NAME:
Envilab Sdn. Bhd.

ADDRESS:
38, Jalan Pingai,
Taman Pelangi,
80400 Johor Bahru,
Johor

CONTACT:
Tel: +073326277
Fax: +073319357

EMAIL:
jbe@its-envilab.com

Name of Supervisor:
Voon Wan Sin
Email:
wsvoon@its-envilab.com
Tel: 011-21793950

What I learned?
Communication skill
Team Work
Time management
Multitasking

INTRODUCTION

- ESTABLISHED IN 1978
- 40 YEARS OF EXPERIENCE IN PROVIDING MOST EFFICIENT AND COST EFFECTIVE SOLUTIONS TO CLIENT
- ENVIRONMENTAL CONSULTANT (WASTEWATER TREATMENT, MONITORING)

JOB SCOPE

- AMMONIACAL NITROGEN TEST
- TOTAL KJELDAHL NITROGEN TEST
- TOTAL NITROGEN TEST
- TEST KIT
- TOTAL DISSOLVED SOLID AND PH MEASUREMENT
- SAMPLING
- KEY IN THE INFORMATION OF CERTIFICATE ANALYSIS





Bunge Loders Croklaan Oils Sdn Bhd is oil and fat manufacturing company supplying fractionated oils and blends, and specifically formulated ingredients required by the processed food industry (bakery, confectionery, frying, margarine and infant nutrition sectors)

Mini Project

Chemical Interesterification (CIE) and Refining IE PMF for Margarine

Training Scope

CIE

Physical Refining

Degumming

Bleaching

Deodorization



Basic Analysis

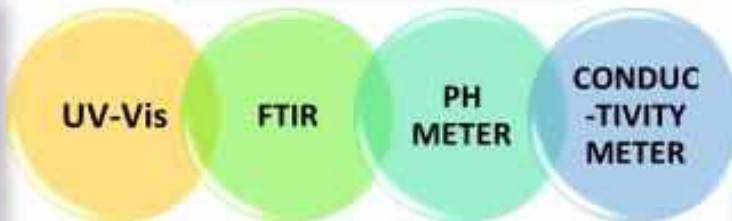
- Peroxide Value
- Iodine Value
- Free Fatty Acid
- Moisture
- Lovibond Color
- Slip Melting Point
- Solid Fat Content

Lesson Gained

- Laboratory Skills
- Time Management
- Communication Skill
- Adaptability

Sunward Pharmaceutical Pte Ltd is a manufacturer and marketer of healthcare products. Sunward has two generic pharmaceutical production factories, one in Singapore (established in 1968) and the other in Malaysia (established in 1992).

INSTRUMENTS USED



VALUABLE EXPERIENCES

- ✓ I've got a chance to observe how other staffs run HPLC instrument and they taught me on how to conduct test by using HPLC.
- ✓ I've visited other labs such as Micro Lab & they explained me on how the tests are conducted there.
- ✓ My supervisor put a trust on me to do her tasks.

LESSONS GAINED



TIME MANAGEMENT



COMMUNICATION SKILLS



ADAPTABILITY



TEAM WORK




Wardah Syabila Bt Adhamsha
3SSCA
A16SC0294



Ms Ng Biow Teng
QC Manager
Sunward Pharmaceutical



Dr. Nursyafreena bt Attan
Dr Nurulhidayah bt Salamun
Department of Chemistry UTM

SUNWARD CONTACT



07-2367531



hr_officer2@sunwardpharma.com



Allowance provided !!

Job Scope

- * Quality Check for finished goods
- * Kardex Remstar storage management
- * Support Halal application process
- * Recheck for raw material
- * Flash point determination for new developed product

Learnings

- * Operate FTIR, densitometer, colorimeter, Kardex Remstar, GC-FID
- * Multitasking, communication skills, problem troubleshooting and solving.



Luzy was founded as a commercial trade in perfume compounds, essential oils and non-toxic colours in 1926 by Hermann Luzy that based in Switzerland. It was currently handling the supply of fragrance compounds based on customers' needs in Asia.

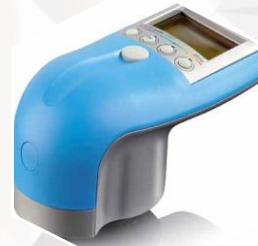
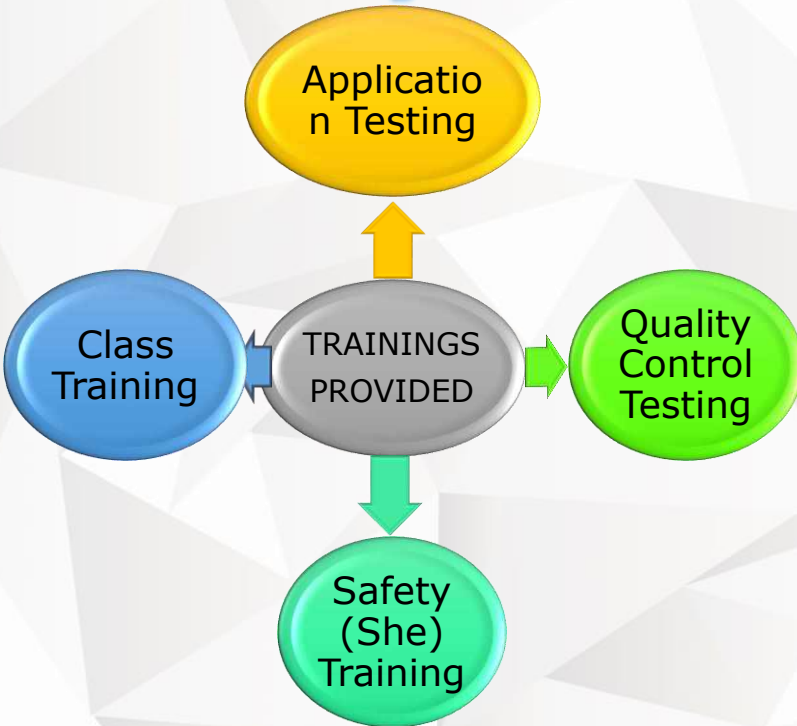
Industry Supervisor
Corinne Eggen
Fac Supervisor
Dr Hasmerya Maarof
Dr Rohul Hayat Bin Adnan

INDUSTRIAL RESEARCH TRAINING
SSCU 3905
SESSION
2018/2019

OBJECTIVES:

- I. To interact and communicate effectively with all parties
- II. To give a critical, confident and innovative opinion and be able to solve problem professionally
- III. To display ethics and integrity in performing a given task

TRAINING PERIOD 12 WEEKS



OPTICAL PROPERTIES TESTING & ETC

RECOMMENDATIONS



FACULTY SUPERVISOR VISIT



NAME: **DHIVASSINI DEVI MURUGANANTHAN**
MATRIC NO.: **A16SC0319**



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



The Department of Chemistry Malaysia consists of a network of laboratories that provide analysis, investigation and scientific consultancy to government agencies

ITK Section: provides analytical and advisory services to support the enforcement of laws as well as for the implementation of programmes relating to protection of government revenue, safeguarding consumer interests and ensuring the safety of workers

MINI PROJECT

Homogeneity and Stability Study of Whisky QC Sample

- Preparation of whisky sample for homogeneity test
- Stability Method
- Short Term Stability

TRAINING SCOPE

Determine the quality of:

- Palm Oil or Palm Oil Product
- Alcoholic Beverages
- Cigarette
- Samsu
- Fuel Oil

LESSON GAINED



Laboratory Skill



Communication Skill



Time Management



Adaptability



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

INSTRUMENTATION



GC-FID



GC-MS



NIRS



UV-VIS



Fatin Adilah binti Jamsari
3 SSCA

<https://www.kimia.gov.my/v3/ms/>

✓ WITH ALLOWANCE



Faculty Supervisor
Lecturer Department of
Chemistry UTM
Dr. Faizuan bin Abdullah
Dr. Fazira Ilyana binti Abdul
Razak



Industrial Supervisor
Puan Azian Murni binti Ab
Ghani
Scientist C44, Head of ITK
Section



JABATAN KIMIA MALAYSIA (JKM)– NEGERI JOHOR

Munirah binti Zainal (3SSCA)



Basically, JKM Negeri Johor is one out of 13 JKM branches that provides analysis, investigation and scientific consultancy services to government agencies.

Narcotic Section is one out of four sections under the Center of Analysis for Forensic Science.

Narcotics Section provides services for:

- Analysis of seized substances relating to possession and trafficking of dangerous drugs
- Investigation of clandestine laboratories
- Drug profiling



Job scope– Routine analysis of Narcotic:

Preparation of drug samples for:
Colour test and GC-MS (Qualitative)
GC-FID/ HPLC (Quantitative)



Experiences:

- Forensic Division meeting
- Monthly assembly
- GC-MS course (3days)
- Learn the procedure in receiving case stuff from police.

Mini project:

Validation of Raman Spectroscopy (portable Raman)



Industry supervisor:

Ms. Liew Chyi
Head of Narcotic Section

Faculty supervisors:

Dr Fazira Ilyana Abd Razak &
Dr Faizuan Abdullah

APPLICATION THROUGH JKM OFFICIAL WEBSITE: <https://www.kimia.gov.my/v3/ms/>

With allowance





Micron Technology is a world leader in innovative memory solutions that transform how the world uses Information.

Personal Information

Gan Yi Yun
3 SSCA

Industrial

Zarinawati binti Hussin
Process Eng Lead

Faculty Supervisor

Dr Yeak Su Hoe
Dept of Mathematics

Training Info

Process Characterization (Project)
Data Collection
Data Analysis
Machine Operation and Conversion



Design of Experiment (DOE)
Process Improvement
Statistical Process Control
Environmental, Safety & Health Training

Social Activities during Industrial Training



National Intern Day



CSR Plogging Event



Engagement Session with Senior Vice President



Benefits

Internship Allowance
Food Subsidy
Working Shirts
Comfortable Working Environment

+60 6-956 2600
<https://www.micron.com>

No. K93 (Plo 74) 84007, Jalan Perindustrian 7, Kawasan Perindustrian Tanjung Agas, Johor, Malaysia



A multinational company that conducts inspection, testing, verification and certification on products that range from raw materials to the final products for a wide variety of industries.



SAMPLE PREPARATION

- Hot block digestion method



- Microwave digestion method



ICP-MS

- combination of Inductively Coupled Plasma with Mass Spectrometry

Advantages

- multielement capabilities
- good precision
- long linear dynamic range
- simple spectra
- low detection limits at ppb level



QUALITY CHECK

- to ensure the validity of results
- Method Blank (MB)
- Laboratory Controlled Sample (LCS)
- Matrix Spike - Accuracy
- Replicate - Precision

- Certified Reference Material (CRM)
- Initial Calibration Blank / Continuous Calibration Blank (ICB/CCB)
- Initial Calibration Verification / Continuous Calibration Verification (ICV/CCV)

TEAM SGS



ANY ENQUIRY, PLEASE CONTACT:

SGS (Malaysia) SDN BHD
Lot 3 + 4, Persiaran Jubli Perak,
Seksyen 22 Shah Alam,
40300 Malaysia
Tel: +603-76270080

TRAINING AND PRACTICES



Analysis of Raw Material-
RBDPO/METHANOL/SODIUM
METHYLATE/METHANOL/CAUSTIC
SODA/CRUDE GLYCERINE

Analysis of In-process Sample -
PME/REFINED
GLYCERINE/VITAMIN E

Analysis of Final Products -
PME/ REFINED
GLYCERINE/VITAMIN E

Labscale Production of Biodiesel
from RBD Palm Olein via
Transesterification

Analysis using Gas
Chromatography/ Karl Fisher
Volumetric/ Karl Fisher
Columetric/ Lovibond

- Allowance Provided
- Birthday Celebration every month
- Raya Celebration

INTRODUCTION

My industrial training was completed in Vance Bioenergy Sdn. Bhd. (VBSB) Pasir Gudang.

I was placed in Quality Control & Lab department. Our job scopes are to carry out quality control test to ensure that a manufactured product or performed service adheres to a defined set of quality criteria or meets the requirement of the clients and customer.

Our philosophy is to do our best to fulfill our customer's needs and constantly improve our products and services to ensure a healthy environment for current and future generation.

The main products in VBSB - **BIODIESEL / REFINED GLYCERINE / VITAMIN E / COCODIETHANOLAMIDE**

PRODUCT IN VBSB



INSTRUMENTATION



SUPERVISOR'S VISIT



INDUSTRIAL SUPERVISOR

Mrs. Farhana Ibrahim
QC & Lab Manager
Vance Bioenergy Sdn. Bhd.

FACULTY SUPERVISOR

Dr. Susilawati Toemen
Department of Chemistry
Universiti Teknologi Malaysia

CONTACT DETAILS

07-2543668
WEBSITE
www.vancebioenergy.com

INFOGRAPHIC



Nurul Azwani Azmi
3SSCC
A16SC0308



INTRODUCTION

Name of Company

Vance Bioenergy Sdn. Bhd

Address

Vance Bioenergy Sdn. Bhd. PLO
668 & 669 Jalan Keluli 5
Kawasan Perindustrian Pasir Gudang 81700 Pasir Gudang Johor

What This Company Do

Producer of fatty acid methyl ester (Vance Biodiesel), pharmaceutical-grade refined glycerine (Vance Refined Glycerine) and other oleochemicals for use in many industries.

EXPERIENCES

I had been at QC department for this 12 weeks. A lot of things that had been learned especially about the oleochemical industry sample testing, time management during working, and the usage of the instrument in the laboratory which are GC- FID, HPLC and Karl Fischer.

Things Learned

Familiar with working environment

Improve communication skill

Get involved in solving problems

working smart under pressure

FACULTY SUPERVISOR
Dr Susilawati Toeman
(Lecturer Faculty Of Science)

INDUSTRIAL SUPERVISOR
Mrs. Farhana Ibrahim
Manager of QC department at Vance Bioenergy Sdn.Bhd



Instrumentations

Mini Project

Title:
Production of Biodiesel from Palm Oil.

Objective:
To obtain the product of biodiesel from palm oil via transesterification process



GC



HPLC



Karl Fischer Titrino



Karl Fischer Coulometric

Introduction of the company

- Leading ISO 9001 certified producer of **Refined Glycerin, Palm Methyl Ester, Vitamin, and Cocoamido-propyl betaine**
- Has two sites which is Nibong site and Keluli site
- I was based on Keluli site

Job scope as QC Intern

- Testing of raw materials
- Testing of in process samples
- Testing of final products
- Documentation
- Waste water Treatment introduction

Name : ShaminiA.Shunmugam

Program : 3 SSCC

Company's Name : Vance Bioenergy Sdn Bhd



Project

- **Lab-scale production of Palm Kernel Olein Methyl Ester**
- It includes the testing of raw materials and final products of the trial
- Exposed myself with transesterification process better

Instrumentation Used

- Gas chromatography
- High performance liquid chromatography
- Karl Fisher Volumetric and Coulometric
- Lovibond PFX 195i



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

ENVILAB SDN BHD

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: Nurul Aishah Bt Daud
Course :Bachelor Of Science
(Industrial Chemistry)
Matric No : A16SC0217

JOB SCOPE

- Bod analysis
- PH and TDS analysis
- Turbidity, Conductivity
- Nitrate and Phosphorus analysis using UV-Vis
- Dissolved oxygen analysis



pH and TDS meter



DO meter and stirrer for Bod reading



AAS



Incubator to placed Bod sample (3days)



UV- VIS instrument

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

CONTACT

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



INTRODUCTION PLACE

PLO 8 & 9, Jalan Timah,
Pasir Gudang Industrial
State 81700 Pasir Gudang,
Johor, Malaysia

Contact: 07-3818888



The reason why I seat at the middle because this time we celebrating baby july's birthday including me 😊

SUPERVISOR

Fakulti:

Dr Khairil Juhanni Abd
Karim

Industry:

Mr. Ho Chin Woon
(Application&Development)



PERSONAL DETAIL

Name: **Muhamad Fakhrol Syafiq Bin Alias**

Matric No: **A16SC0118**

Tel No: **010-8834722**

E-mail: **f.syafiq96@gmail.com**

EXPERIENCE

I was placed under Product Development for 12 weeks and I had experienced all the process that they conduct for daily life that could enhance my basic skill in chemistry. For example; titration, weighing, calculating the exact amount of new recipe, and handling all type of glassware. Besides, bond between me and staffs are so close because they are so friendly and even will answer a silly question.

WHAT I HAVE LEARNED

- Basic test to check whether the result met the customer's specification or not.
- Chemical Interesterification
- Bleaching: To remove gums or phospholipid in oil.
- Deodorizing: To remove free fatty acid (odour, bad taste)

INTRODUCTION

Bunge Loders Croklaan are a leading producer of premium quality vegetable oils and fats. With state-of-the-art various processes such as fractionation, interesterification, emulsification, Bunge Loders Croklaan is well positioned to deliver unique functionality and value to the end product.

SUPERVISOR

MR UTHIAMURTHI A/L RAJA
EXECUTIVE QC CHEMIST
(INDUSTRIAL SUPERVISOR)

DR KHAIRIL JUHANNI ABD KARIM
DR JUAN BIN MATMIN
(FACULTY SUPERVISOR)

THINGS LEARNT AT WORK PLACE

There are plenty of new things that I learned throughout these 12 weeks of my industrial training. I had the chance to handle instruments like the NIR machine, UV-Vis spectrometer, Dropping point machine, Karl Fisher Analyzer, Gas Chromatography (GC), and High Performance Liquid Chromatography (HPLC). Other than instrumentation, I also learned how to basic tests like Iodine Value (IV), Free Fatty Acid (FFA) & Peroxide Value (PV).

MINI PROJECTS

- 1) CALIBRATING THE NIRS MACHINE
 - Curve includes products from ADEKA, Palmitic, IPOM & CPO
- 2) FLASH POINT STUDY
 - Study the Flash Point of products with different concentration of acetone in products like IV64, IPOM, Shea Olein & Shea Stearin.
- 3) Determination of sorbitan triesterate (STS) in fats & oils
 - Quantitatively and Qualitatively analyse the presence of STS



CONTACT DETAILS

EMAIL: Nurulzzati.Mustafa@bunge.com

TELEPHONE:
+6 (07) 381 8888 (Ext 542)

ANORFITIK
 NAZIHAH BT MOHAMMAD
 KHAIRI
 35SCC A16SC0156
 UJYEMURA
 (MALAYSIA) SDN BHD

**ABOUT
 UYEMURA**

- Located at industrial area in Pasir Gudang
- Specializes in electro and electroless plating technologies
- Treatments of chemicals



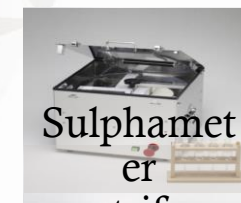
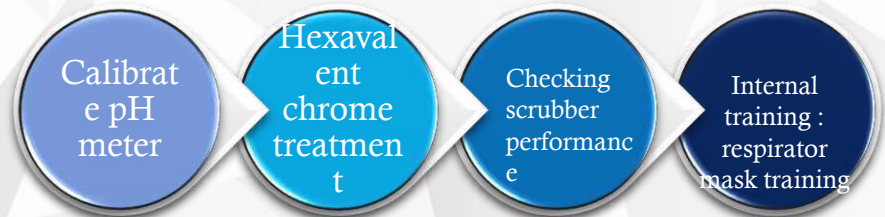
Things Learnt:

- Compare the theoretical knowledge and actual environment
- Actual working environment is very challenging
- Hands-on practice on handling instrument



Industrial supervisor, Dr Wong Jia Tian
 Activity coordinator, Nurul Aidilla Nahrawi

Other Activities



Mini Project 1: Evaluation of Sulphur Additive (Type A) Towards Chromium Plating Length and Deposit Thickness

Mini Project 2: Evaluation of Corrosion Performance of CLH-1 Solution with Sulphur Additive (Type B)

©To evaluate the corrosion resistance of the sample after plating with CLH-1 : Sulphur additive (Type B) and compare the appearance with conventional





Main activities

- Sample analysis
- Practical of instrument (AAS ,UV-vis, XRF-coating thickness gauge, Hardness Testing Machine)
- Preparation of solution
- Hull cell test

**Industrial Training
(Internship)**

**UYEMURA
(MALAYSIA)
SDN. BHD.**

Special training

- ERT training
- Respiratory protection training
- Preparation of Safety Data Sheet and Chemical classification record
- Root cause analysis



Additional activities

- pH meter calibration
- Scrubber performance checking
- Chemical inventory
- Chromium treatment
- SS routine

**Manufacturing electro
and electroless plating
solution**

Mini project

- Hull cell test for acid copper bath (copper plating)
- To observe the effect of plating under different parameter of plating condition





Johor Department of Environment



AZZYAN IZZATY BINTI ZULKIFLI

A16S0025

46, Jalan Pertama 1,
Taman Tampoi Indah 2,
81200 Skudai, Johor.



THE VISION OF DOE IS ENVIRONMENTAL CONSERVATION
FOR THE WELL-BEING OF THE PEOPLE

VISION

MISSION

THE MISSION OF DOE IS TO ENSURE SUITABLE
DEVELOPMENT IN THE PROCESS OF NATION BUILDING

I was assigned six out of ten unit in that company. I also got the chance went to a site visit for their enforcement. This company shows how industry works and how the industry maintain their operation to avoid any possible pollution.



QUARRY AT PONTIAN



INSPECTION AT KLUANG



ENFORCEMENT
AT ULU TIRAM



EXHIBITION
AT DESARU



ENFORCEMENT
AT Pengerang



Department of Environment Johor



Industrial Visit at Lotte Chemical Titan



Industrial Visit at Malakoff PP



Briefing by Supervision Unit



Site visit for TOR meeting



Week 1-3
Communication and Information Dissemination Unit

- Joined exhibition and events of DOE
- Conduct a program with community

Week 8
Motor Vehicle Unit

- Ops Static
- Study the requirement of emission for petrol and diesel vehicles.

Week 4-6
Environmental Impact Assessment Unit

- Site visit to company
- EIA presentation
- Segregate report for HQ reference

Week 9
License Unit

- Enforcement to partial e-waste factory

Week 7
Scheduled Waste Unit

- Study the guidelines that related to schedules waste management by following EQA 1974

Week 10-11
Stationary Resources Unit

- Study the guidelines that related to stationary resources unit procedure under EQA 1974

Enforce at Reclamation land



National Scouts Camp

Mini programme



Faculty's supervisor visit

AIMI ALIAH BINTI MOHAMD YUNUS
A16SC0327
3SSCC

1 EDUCATION UNIT

Responsible to give awareness to public on the importance of conservation and preservation of our environment through campaign, exhibition, etc.



Activity in collaboration with KEMAS



Exhibition at Toshiba Tec Malaysia Manufacturing Sdn. Bhd., Bayan Lepas

PERSONAL DETAILS
NOOR AIDA FAZIRA
BINTI MOHD SALLEH
A16SC0146
BACHELOR'S DEGREE
IN SCIENCE
(INDUSTRIAL
CHEMISTRY)

2 MONITORING UNIT

Responsible to do monitoring due to complaint, auditing of data and sampling of water such as groundwater, river water, and seawater.



Sampling of River and Monsoon drain water in Bayan Lepas

3 POST EIA UNIT

Responsible to study the environmental impacts of a proposal and identify the options to minimize the environmental damage of any proposed projects to be done.



A site visit to Indah Water Konsortium (IWK) Phase 2, Bayan Baru to see progress of upgrading system

4 COMPLAINT UNIT

Responsible to receive, manage, do investigation on complaint area and take appropriate action on any complaints from public.



Site monitoring due to open burning complaint

INTRODUCTION

Department on Environment (DOE) was originally created on 15 April 1975 and responsible for the prevention, control and abatement of pollution in the country through the enforcement of the Environmental Quality Act of 1974 and its subsidiary legislation.



PERAI:
Micron Memory Malaysia Sdn. Bhd.



INTERNSHIP

6 POINT SOURCE UNIT

Responsible to do monitoring and enforcement visit and actions toward all the premises or industries in Pulau Pinang to ensure that they comply to the act and regulations.

•Having chance to join enforcement visit to a few industries:

5 LICENSING UNIT

Responsible to manage all the things related licensing application from premises ('Premis Yang DiTetapkan') and monitor their compliance to act and regulations.

•Having chance to learn about a few online systems used in DOE:

- 1) e – Kawalan Alam Sekitar (e-KAS)
- 2) e – Scheduled Waste Information System (e-SWIS)
- 3) Business Licensing Electronic Support System (BLESS)

Operation on releasing of dark smoke from Diesel vehicles

MINI PROJECT

- ✓ Need to do checking on Industrial Effluent Characterization Study (IECS) reports of three premises:
 - Micron Memory Malaysia Sdn. Bhd.
 - Percetakan Konta Sdn. Bhd.
 - Fatty Chemical (Malaysia) Sdn. Bhd.
- ✓ Check on the laboratory analysis results of effluent sampling, determine the compliance of First Schedule of Environmental Quality (Industrial Effluent) Regulations 2009 on the premises, and study on the design of Wastewater Treatment Plant of the premises.



Jiuh Yang Metal Industry Sdn. Bhd.



Swanson Plastics Malaysia Sdn. Bhd.

Sanchem Corporation Sdn. Bhd.



Fatty Chemical Malaysia Sdn. Bhd.



Jishan Pack Sdn. Bhd. (Plant 2)



MCC Labels (Penang) Sdn. Bhd.



Lintec Industries Malaysia Sdn. Bhd.



CONTACT:

PK ENCIK SUFFIAN BIN
JULMOHAMAD

Phone No.:04-5751911

Email: suffian@doe.gov.my



Department of Chemistry Malaysia provide analysis, investigations and scientific consultancy to government agencies.

Mini Project

- *preparation of paint samples, homogenies and mixed with water colour
- *Measure the Titanium Dioxide in Paint Samples in different state
- *Measure the Titanium Dioxide in pure paint samples and mixed samples by using XRF Spectrometer.

Training Scope

- *Determination of:
 - Chemical Oxygen Demand (COD) high level and low level
 - Metals using ICP-OES
 - Total Nitrogen (TN)
 - Phosphate, Sulphate and Silica by using UV-Vis
 - Chloride and water hardness
 - Biochemical Oxygen Demand 5 Days (BOD5)
- *Turbidity, colour, pH

Lesson Learnt



Laboratory skill



Communication skill



Problem solving skill

Samples Type

- *Drinking water
- *Water quality of reservoirs, rivers and lakes
- *Metal samples
- *Oilspill samples



Instrumentation



Siti Maisarah Binti Abd Rashid
3SSCC



Faculty Supervisor
Dr. Fazira Ilyana Binti Abd. Razak
Dr. Faizuan Bin Abdullah



Industrial Supervisor
Mrs. Shahrulnizahana Binti Mohd Din
Miss Farizsya Hani Binti Hammim

PRISMA LABORATORY (M) SDN. BHD.

No 36, 01, Jalan Kempas Indah 1/1, Taman Kempas Indah, 81300 Johor Bahru, Johor

ALLOWANCE PROVIDED !!!

Prisma Laboratory's advanced facilities and specialized teams offer independent internationally accredited laboratory and analytical testing services.



Experience Gained:

1. Learned different kind of chemical testing for water and waste water samples.
2. Learned food testing for food samples.
3. Learned how to dispose samples.
4. Improve laboratory skills.
5. Can handle pressure, worked overtime and do multitasking.

Notes:

The employer not allow internship to run instruments (GC and HPLC only), but can do sample preparation. Only staff can run the instrument.

INDUSTRY SUPERVISOR:

En. Muhammad Hafiz
bin Abu Bakar

PREPARED BY:

Mohd Amirul
Mukminin bin Latirin
SSCC
A16SC0115



INDUSTRIAL TRAINING

CHANG JIA HUAN
Bachelor of Science
(Industrial Chemistry)
Universiti Teknologi Malaysia
funvfunv4@gamil.com
017-7510721



INDUSTRIAL SUPERVISOR



**PURICS WATER
SDN. BHD.**

WATER FOR ALL

NG CHAI BENG
PROJECT MANAGER
Bachelor of Engineering
(Chemical Engineering)
University of Adelaide, Australia.
PURICS WATER SDN. BHD.
chaibeng.ng@puricswater.com

FACULTY SUPERVISORS



DR. JOAZAIZULFAZLI BIN JAMALIS
Lecturer of Faculty Science
joazaizulfazli@utm.my
07-5534313

DR. MOHD AKMALI BIN MOKHTER
Lecturer of Faculty Science
mohdakmali@utm.my

COMPANY PROFILE

- Built in 2003.
- Supply of specialty chemicals.
- Water business comprises: raw water, process water and pure water.
- Environmental business: complete waste water treatment plant (WWTP) from design, built, operate, maintain, transfer or supply basis.
- Provide total solution of water purification & recycling system on turnkey basis, upgrading or improvement of system.



WHAT I LEARNT

Jar test



- A pilot-scale test of the treatment chemicals used in a particular water plant.
- To determine the right amount of treatment chemicals (dosage) & suitability of treatment chemicals



Polymer efficiency comparing test

- To find out the most effective polymer in settling the sludge.
- Sludge sample from different industry/ factory may need different types of polymer for their best



Fields Visits



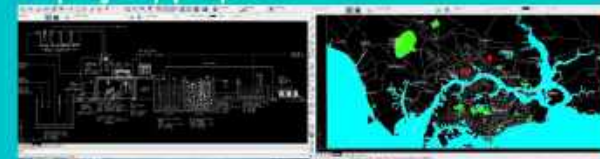
- Ceramic & tiles manufacturing industry
- Palm oil mills effluent industry (POME)
- Simpang Renggam palm oil estate
- Milks & yogurts manufacturing industry



Software AutoCAD



- To draw flow diagram of treatment plant & DAF system & Layout plan for project/ proposal



Others



- Cost calculation based on require dosage
- Calibration of pH sensor
- Power adjustment of chemical pump

KAREX INDUSTRIES SDN BHD

WORLD'S LARGEST CONDOM MANUFACTURER

02 JOB SCOPES

- Colloidal testing
- Determination of the concentration of NH_4OH , NaOH , and Na_2CO_3 in mixture solution
- Condom dipping – color matching
- Operational Qualification (OQ) of dipping line P1 for P53S Orange Glow Condom
- Performance Qualification (PQ) of dipping line P1 for P53S Orange Glow Condom and Green Glow Condom
- Follow up and summarize QC In-Process testing results, electronic testing results, foiling, finished product testing and stability results

01 COMPANY OVERVIEW

Established in 1988 to manufacture high quality natural rubber latex condoms and other latex dipped products. As a world's largest condom manufacturer, the Group produces a full range of condom variants to meet the ever-changing consumer demands.

03 EXPERIENCES

- Gain deeper insight into the polymer industry
- Enhanced laboratory/practical skills
- Understand and familiar with the complete process of condom manufacturing, testing, and packaging
- Create relationship and connections with colleagues and fellow interns
- Improved communication skills with the ability to speak in professional setting



CHAO WEN TING

R&D INTERN

3SSCC | A16SC0028

✉ chaowenting75@gmail.com

☎ +60198300075

04 INSTRUMENTS & MACHINES



pH meter



Rubber Tensile Strength Tester



Brookfield Viscometer



Klaxon MK2 Latex Test



Lab Scale Dipping Machine



KAREX INDUSTRIES SDN BHD

📍 Lot 2244, 8T 39 1/2, Pontian Besar, 82000 Pontian, Johor, Malaysia

☎ +607 687 8833 / 688 1996

✉ siti@karex.com.my / nur.syafigah@karex.com.my

* Allowance is provided (RM 1.2k)

INDUSTRY SUPERVISOR

📍 Loh Yi Yee, Senior Chemist @ R&D Department

☎ +6011 1063 7723

✉ yyloh@karex.com.my

FACULTY SUPERVISOR(S)

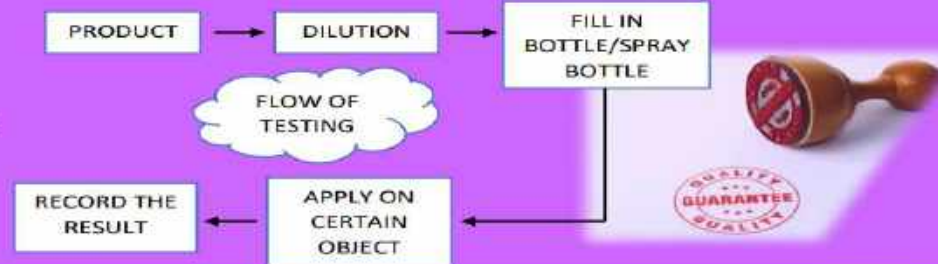
Dr Siti Aminah Setu & Dr Siti Emleyanti Binti Hashim
Senior Lecturer
Department of Chemistry, Faculty of Science,
University of Technology Malaysia (UTM)

INTERNSHIP PROGRAM



TEST EFFICIENCY OF PRODUCT

- TO MAKE SURE THE PRODUCT SAFE
- TO MAKE SURE THE QUALITY FULFIL COSTUMER'S NEED
- TO MAKE SURE THE PRODUCT TRUSTED BY USER



PRODUCT	OBJECT
DIRT BUSTER	RIM, MOTOR CHAIN, WHITE VEHICLE
GLASS KLEEN	VEHICLE MIRROR, WINDOW
SOLVENT DENGREASER	CAR ENGINE PART
TYRE WAX	CAR AND BIKE TYRE
BOWL KLEEN	TOILET BOWL
CEMENT SOFT	CEMENT RESIDUE ON TILE



MARKETING

RESULT FROM PRODUCT TEST
RECORDED IN VIDEO AND PICTURE

EDIT VIDEO AND PICTURE

POST ON MEDIA SOCIAL SUCH
AS FACEBOOK AND SHOPEE

design and renew a sticker for product



Old sticker



New sticker



Production



- Packaging
- Prepare/dilute the product
- Check product pH
- Clean and wash the bottle for restock the product

Safety Data Sheet (SDS)



Contains 16 sections:

- | | |
|--------------------------------|---------------------------------|
| 1. Identification | 9. Identification |
| 2. Hazard Identification | 10. Hazard Identification |
| 3. Composition | 11. Composition |
| 4. First Aid measures | 12. First Aid measures |
| 5. Fire Fighting Measures | 13. Fire Fighting Measures |
| 6. Accidental Release Measures | 14. Accidental Release Measures |
| 7. Handling and Storage | 15. Handling and Storage |
| 8. Exposure Control | 16. Exposure Control |



UTM



INTERNSHIP PROGRAM SSCU3905 SHORT SEMESTER/SESSION 18/19



HAMIZAN ARIFF BIN HAMI'AT
3SSCC
A16SC0061

**INTERNSHIP POSITION:
R&D DEPARTMENT**

COMPANY PROFILE :

DESANS SOLUTIONS SDN.BHD
NO 38, JALAN ALAM JAYA, TAMAN
PERINDUSTRIAN ALAM
JAYA, 81500, PEKAN
NENAS, PONTIAN JOHOR.

STATUS COMPANY :

A MANUFACTURING COMPANY,
SPECIALIZING IN THE PRODUCTION
AND MARKETING OF CLEANING
CHEMICAL SOLUTIONS, TARGETING
MULTIPLE MARKETS,
PREDOMINANTLY BUSINESS TO
BUSINESS.

JOB SCOPE

QUALITY CONTROL

- CALIBRATION
- TESTING PH PRODUCT
- SAFETY EQUIPMENT



MARKETING

- DESIGN LABELLING PRODUCT
- PROMOTE PRODUCT



VISSION AND MISSION :

VISSION : WE ASPIRED TO BE
WORLD CLASS ORGANIZATION AND
GLOBAL PLAYER IN THE
DETERGENTS AND CLEANING
PURPOSE

MISSION : BY IMPROVING THE
PROCESSES BASED ON CUSTOMER
FEEDBACK AND AUDIT FINDINGS
AND CREATING ADEQUATE
INFRASTRUCTURE.

SHHM

- SAFETY DATA SHEET (SDS)



SUPERVISOR'S PROFILE

DR. IHSAN WAN AZELEE
019-7106182
IHSAN@DESANS.COM.MY



(KOTA TINGGI BRANCH)

LOT 1877 OFF JALAN TUN SRI LANANG, 81900 KOTA TINGGI, JOHOR

WATER QUALITY TEST



MANGANESE TEST



ALUMINIUM TEST



IRON TEST



FLUORIDE TEST



CHLORINE TEST



AMMONIA TEST

COMPANY BACKGROUND

- Ranhill SAJ operates as an incorporated water supply firm
- Also involved in the operation, maintenance and development water treatment, reticulation and supporting systems

EXPERIENCES

- Handling different water quality test and jar test in laboratory
- Learning water treatment process via conventional and Revofilter method thoroughly
- Chemical dosing calculation used in water treatment plant
- Site visit to other water treatment plant

FATIN HAZIRAH BINTI RAMLI

3 SSCC

PORTABLE INSTRUMENT



DR890 COLORIMETER



TURBIDITY METER



Sension + PH1 METER



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



Faculty supervisor

Dr Joazaizulfazli bin Jamalis
Dr Mohammad Akmal bin

NURFATANAH BINTI MOHD AMIN
3 SSCC

Industry supervisor

Halimah binti Abu Bakar
Mohd Rasydan bin Wahit



BACKGROUND COMPANY

- Ranhill Holding Berhad is an integrated water supply company
- process of water treatment and distribution of treated water
- Operations, maintenance and development of water treatment

FIELD OF TRAINING

- Analyze water quality sample of raw water and treated water.
- Understanding process and system of water treatment in Kluang district.
- Site visit to other water treatment plant and center laboratory.

ADDRESS

Ranhill SAJ (Kluang branch)
Lot PTD 4543, Jalan Ibrahim, 86000 Kluang,
Johor

CONTACT

Phone number : 07-7735040



COLORIMETER



TURBIDIMETER

PORTABLE INSTRUMENT



PH METER

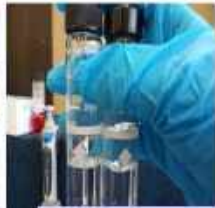
STREAMING CURRENT MONITOR



MANGANESE TEST



ALUMINIUM TEST



IRON TEST



AMMONIA TEST



FLUORIDE TEST

WATER QUALITY TEST



JAR TEST

TO BECOME A WORLD CLASS WATER UTILITY COMPANY

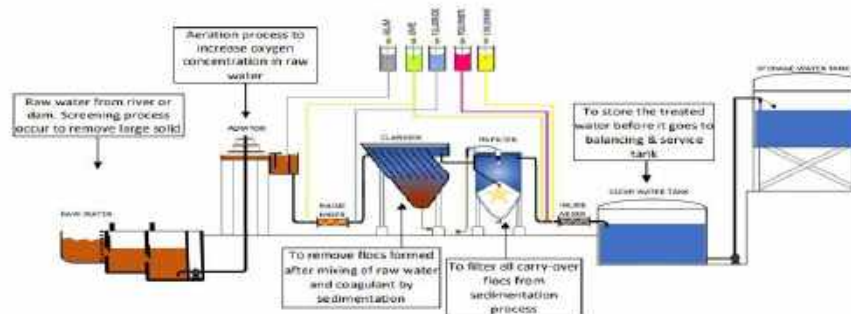
Ranhill SMI Sdn Bhd is an integrated water supply company which involved in the process of water treatment and distribution of treated water to consumers right up to billing and collection.

Water Treatment Process

What?

Water treatment is any process that improves the quality of water to make it more acceptable for a specific end-use. The end use may be drinking, industrial water supply, irrigation, river flow maintenance, water recreation or many other uses, including being safely returned to the environment. Water treatment removes contaminants and undesirable components, or reduces their concentration so that the water becomes fit for its desired end-use.

Water Treatment Process (Package Plant)



Internship Journey

Field Training

- Participate in a few courses and training
- Understanding the process and system of water treatment plant
- Go for work training in different plants
- Site visit to other water treatment plant
- Given a few assignments and task



Jar Test

Ammonia Test

Aluminium Test

Iron Test



Turbidimeter

Colorimeter



Fluoride Test

pH Meter

Online Analyser

Streaming Current Monitor

Introduction

Eurofins NM Laboratory Sdn Bhd provides a unique range of analytical testing services to the pharmaceutical, food, environment and consumer products industries and government.

Consultation service for specific fields such as occupational safety and health are also provided here.

Experiences

- Improve laboratory skill
- Experience on real life of working environment.
- Learned several testing for water sample
- Enhance communication skill
- Improve time management

Training & Job Scope

- CHRA & Chemical Exposure Monitoring
- Noise monitoring
- MLSS & MLVSS
- Total Solid & Suspended solid (Palm Oil Mill Effluent)
- Free Chlorine test
- Colour, ADMI & TCU test
- Nitrate, Nitrate-Nitrogen test
- Turbidity test
- Formaldehyde test
- Chloride test

Example of activities



Instrument Handled



HACH DR6000 UV-Vis Spectrophotometer



HACH Portable Turbidimeter



Sound level meter (SLM)



Eutech pH 2700
-
pH meter



DO meter - YSI 5000

PREPARED BY:
HASREEN KHAIRANI
BINTI SALEHAN
AIGSC0063

COMPANY DETAIL

EUROFINS NM
LABORATORY SDN BHD

27, JLN IMPIAN EMAS,
TAMAN IMPIAN EMAS,
81300, SKUDAI, JOHOR.

Industrial Supervisor:
Ms Helen Choo Hui Siang
(Laboratory Manager)
Kiven Tan
(Senior Chemist)

Faculty Supervisor:
Dr Nursyafreena Attan
&
Dr Nurulhidayah Salamun

INDUSTRIAL TRAINING AT CCM CHEMICALS, PASIR GUDANG

10th June to 30th August 2019

Company Profile

- Leader in chlor-alkali industry
- Products: chlor-alkali, PAC, calcium nitrate



Trainee Responsibilities

• Training

- Waste water treatment process
- Jar test

• Routine

- Analysis of chlor-alkali finished products
- Analysis of PAC coagulant
- Analysis of calcium nitrate drying efficiency

• Mini Assignment

- Stability test of sodium hypochlorite

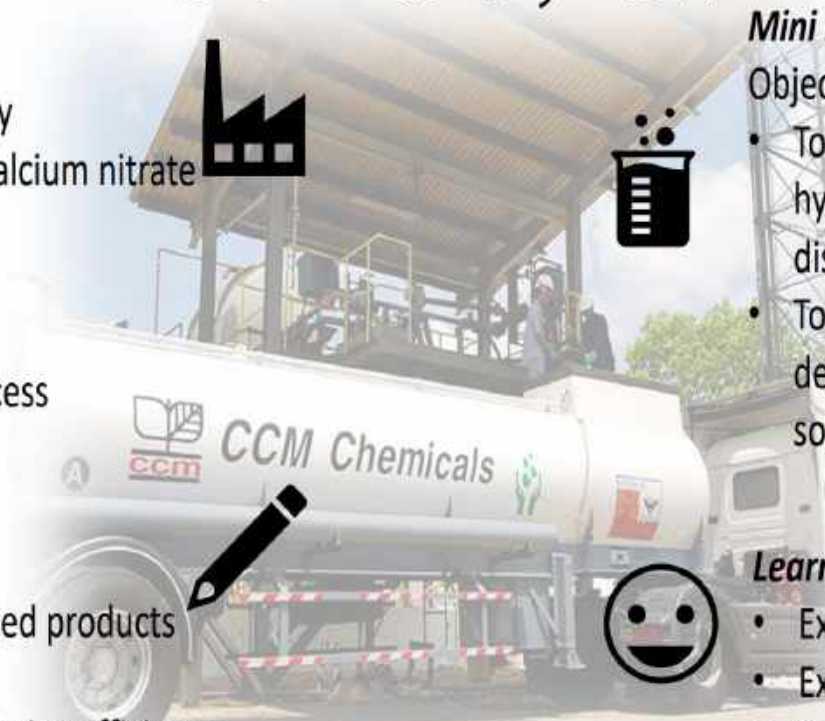
Mini Project

Objectives

- To study the stability of sodium hypochlorite solution as a bleach for disinfection purpose.
- To determine the rate order of degradation of sodium hypochlorite solution using mathematical methods.

Learnings

- Exposure to chlor-alkali industries
- Experiment designation and proposal
- Improvement in laboratory skills, especially manual titration and reagent preparation
- Time management



Student Info
Lim Yong Hui A16SC0098 3SSCC



Industrial Supervisor Info

Madam Haryanty binti Abdul Karim Senior Executive, QA Chemist

INDUSTRIAL TRAINING AT PGEO EDIBLE OILS SDN BHD, PASIR GUDANG

10th June to 30th August 2019



Company Profile

- One of Asia's largest integrated agribusiness groups.
- Main activity: manufacturing of edible oils

Projects' Objectives

- To study the correlation of protein, oil, fibre, moisture contents and urease activity of soymeal products.
- To develop NIRS calibration for determination of iodine value.
- To study the correlation of iodine value, fatty acid composition, cloud point, cold test, slip melting point, solid fat content of palm oil products .



Learnings

- Exposure to oils and fats
- Laboratory testing and quality control
- Improvement in laboratory skills
- Calibration on NIR spectroscopy
- Time management



Student Info
Sam Suat Fen
A16SC0246 3SSCC



Industrial Supervisor
Mr. Gan Yen Shen
Lab Manager



Plantation

ABOUT ME

Name: Siti Atiyah binti Abdullah
No Matric: A16SC0261
Course: 3-SSCC (Industrial Chemistry)
Industry Supervisor: Madam Amirah Ahmad
Faculty Supervisor: PM.DR.Salehuddin Hamdan & DR.
Abdul Fatah

LAB RESULT FOR:

- 1) Slip Melting Point
- 2) Solid Fat Content
- 3) Iodine Value



As a fully-integrated palm oil producer, Sime Darby R&D capabilities encompass all research area requirements across the value chain. Through the strategic and operational R&D, they are committed towards developing, applying and transferring relevant knowledge, research findings and technologies to improve the quality of products.

NIR PROJECT

Purpose: Calibration and Standard
Specification References

Run NIR for 12 oil sample with blending 0-100%

BASIC TEST AND NIR TEST

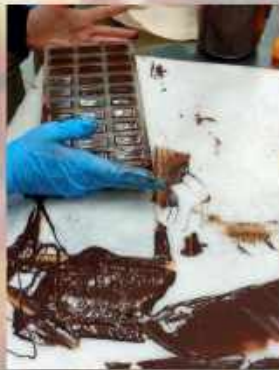
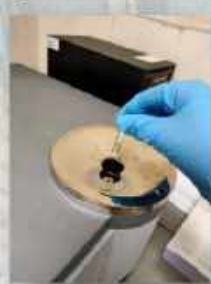
ACTIVITIES AND TRAINING

**Bakery, Confectionery and
Frying Application Training**

**Town hall 7.0 (Safety)
and fire drill**

LESSON LEARNT

- 1) 7 basic test for oil
- 2) Use GC, NIR and NMR
- 3) Oils and Fats applications
- 4) Process of making margarine and shortening
- 5) Oil refining process





INTRODUCTION



Ting Shy Hui

Company : Allied Chemists Laboratory Sdn. Bhd.
Location : 10, Jalan Bakawali 68, Taman Johor Jaya, 81100 Johor Bahru, Johor, Malaysia.

Position : Trainee
Internship Date: 10 June- 31 August 2019



ALLIED CHEMISTS

- ❖ established in 1998 as a leading testing laboratory.
- ❖ recognized as the benchmark for quality and reliability.
- ❖ Allied Chemists core business can be divided into three categories:

Laboratory Testing

Industrial Monitoring

Training & Consultancy

TASKS

Sample Preparation

Antioxidant test

- Sample: Premium Vegetable Oil
- Solvent: methanol
- Instrument: UPLC-UV

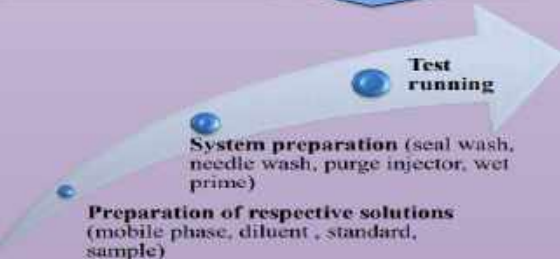
Cholesterol test

- Saponification
- Extraction

Heavy metal test

- Food sample preparation with addition of acid.
- Put in microwave digester.

Project 1: Determination of Benzocaine Gel using HPLC



Instrumentation



GC-MS for benzene test



ICP-OES for heavy metal test

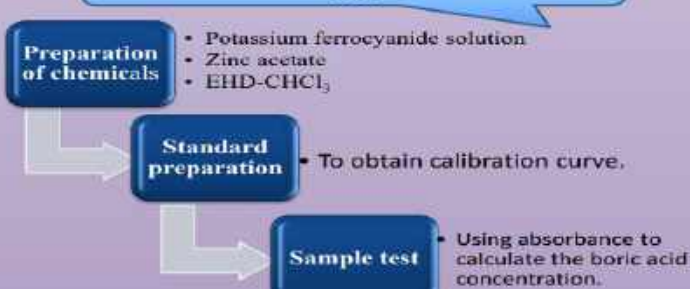


GC-ECD for pesticide test



HPLC-PDA for benzocaine gel test

Project 2: Determination of Boric Acid in food



YONG HUI RU 3SSCC A16SC0300



About Company



Sime Darby Plantation is involved in the manufacturing and distribution of oils and fats products, oleochemicals and palm oil-based biodiesel, as well as fast moving consumer goods.



MY TASKS:

- ✓ Ran the basic tests on oil sample
- ✓ Assisted in doing the oil refining and chemical interesterification
- ✓ Prepared the chocolate for coating



FATTY ACID CONTENT



IODINE VALUE

CHOCOLATE MAKING AND COATING ON WAFERS



TRAINING AND PROGRAMS

- ❖ Fire drill
- ❖ Bakery, Confectionery and Frying Applications Training
- ❖ iCare Townhall 7.0 (Safety)
- ❖ GMP and TMQS talks on safety

FREE FATTY ACID

BASIC TEST OF OIL



SLIP MELTING POINT



SOLID FAT CONTENT

OIL REFINING AND INTERESTERIFICATION



Sime Darby Oils Pasir Gudang Refinery Sdn. Bhd.
PLO 79, Jalan Besi 2,
Pasir Gudang Industrial Estate,
81700 Pasir Gudang,
Johor Darul Takzim.



+607-251 1206
+607-251 1209



TERENGGANU

INTRODUCTION

Syarikat Air Terengganu Sdn. Bhd (SATU) is an integrated water supply company, which responsible to supply high quality treated water to consumer. This company also maintain the best water supply system, plan and accomplish new projects to ensure the development in water supply for better quality water besides controlling non-revenue water problem across Terengganu.



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



NUR ALWANI BINTI ABDULLAH (A16SC0164)

3 SSCC

FACULTY SUPERVISOR: DR. CHE ROZID BIN MAMAT

INDUSTRIAL SUPERVISOR: MR. AZEMI BIN MUSTAFA

FIELD OF TRAINING

- Analyse water quality sample every 2 hours.
- Collecting data for water quality test, plotting graph and do some calculation.
- Backwashing the filter and sedimentation tank.
- Site visit to other water treatment plant and raw water intake.

WATER QUALITY TEST



MANGANESE TEST

TURBIDITY TEST



IRON TEST

JAR TEST



FLUORIDE TEST

ALUMINIUM TEST



CHLORINE TEST

INSTRUMENTATION



DR2700
SPECTROPHOTOMETER



2100P TURBIDIMETER



POCKET
COLORIMETER



LOVIBOND
2000



JAR TESTER

DETAILS

- Syarikat Air Terengganu Sdn Bhd, Kepong 1 Water Treatment Plant, 20200 Kuala Terengganu.
- 09-621 4159
- helpdesk@satuwater.com.my





KELANTAN





AIR KELANTAN SDN BHD KELAR WATER TREATMENT PLANT

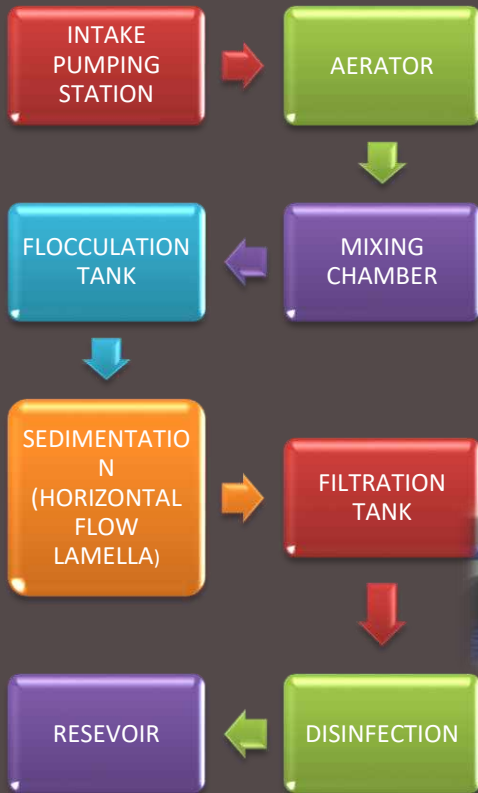


Experiences gained from AKSB Team:

** Handling different water quality test in laboratory such as color test, jar test, turbidity test and pH test in raw water as well as in treated water.

** Do water sampling with Quality Team

** Chemicals dosing calculation used in water treatment plant for instance Flouride, Chlorine gas, polymer and Aluminium Chlorohydrate.



WHAT I LEARNED?

- Teamwork
- Enhance communication skills
- Multitasking
- Improve laboratory skills



NUR SHAFIQAH BINTI MD YUNAN
3 SSCA
A16SC0188
nurshafiqah97@yahoo.com



Mr. Razman bin Ramli
Company supervisor



Dr Razif bin Razali
Visited lecturer from UTM



CONTACT

+6019-9100803

lrakelar@airkelantan.my

With allowance



MY INTERNSHIP INFOGRAPHIC

WATER TREATMENT PLANT PROCESS AROUND KELANTAN

- ✦ CONVENTIONAL TREATMENT SYSTEM
- ✦ ULTRAFILTRATION TREATMENT SYSTEM
- ✦ OZONE TREATMENT SYSTEM
- ✦ CHEMILES TREATMENT SYSTEM
- ✦ DEFERUM & DEMAGNUM TREATMENT SYSTEM



Central laboratory is the one of the unit department of technical and operation to monitor the water quality for entire Kelantan state. this unit responsible to ensure that all water supplied to entire districts meet the demand for entire customer that are clean, hygiene and safe to be used.

DR 5000 HACH SPECTROPHOTOMETER



CM- FLUORESCENCE ANALYSIS CABINET



INCUBATOR



INSRUMENTS HANDLED



MODEL 2X QUANTI-TRAY SEALER



JAR TEST LOVIBOND



ESCO LAMINAR FLOW CABINET

INSTRUMENTS IN-SITU TEST

HACH pocket colorimeter II (chlorine)



HACH Portable Turbidity meter (Model 2100P)



pH METER, pH 3110



HACH Pocket Colorimeter II (iron, Ferrouver)



HACH Disc- Color test kit

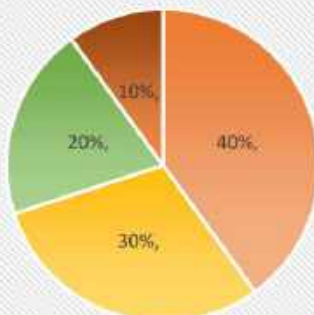


Colorimeter, Hach Model DR/890



THINGS LEARN AT MPAK

- GAINED KNOWLEDGE
- COMMUNICATION SKILL
- WORKING SKILL
- TIME MANAGEMENT



ABOUT ME:

NAME: NUR ATIQAH RAZALI
 CLASS: 3SSCC/KIMIA INDUSTRI
 INDUSTRIAL SUPERVISOR: MR WAN KHAI RUDDIN B WAN OMAR
 FACULTY SUPERVISOR: DR FAIZANI B MOHD NOR





SARAWAK



JABATAN KIMIA MALAYSIA CAWANGAN BINTULU

INTRODUCTION

Jabatan Kimia Malaysia Bintulu Branch (JKMC Bintulu) is one of the small branches of *Jabatan Kimia Malaysia* (JKM). It was inaugurated on 12 April 1986.

WATER QUALITY & ENVIRONMENT LABORATORY

The laboratory for water analysis is shared with environmental analysis.

Enforcement analysis samples: Factory effluents, sewage, hazardous wastes and stack gas samples for dioxins analysis.

Environmental quality monitoring samples: Acid deposition, river water, lake water, sea water, ground water and effluent samples.

ADDRESS & CONTACT NO.

Jalan Tun Razak,
97100 Bintulu,
Sarawak, Malaysia.
086 – 334 211

TRAINING AND EXPERIENCES GAINED

- Safety practices in laboratory
- Water sample analyses
- Cooperation through social activities
- Real life experience on course-related work
- Improve communication skills
- Improve laboratory skills
- Working in organisation

ANALYSIS DONE & LEARNED

- Total suspended solids
- Phenol test
- Chemical Oxygen Demand test
- Chloride test
- Sample Preparation for Metal test by AAS
- Acidity test
- Turbidity test

INSTRUMENT AND APPARATUS

AAS
pH meter
Semi-automatic distillation
unit
Turbidimeter
COD digester unit

FACULTY SUPERVISOR

Dr. Naji Arafat Bin Haji Mahat
naji.arafat@utm.my

INDUSTRY SUPERVISOR

Ms. Norashidah Binti Omar
norashidah@kimia.gov.my

BY

Nurkhalifah Binti Matjisin
3SSCA
A16SC0211



Sirim Standards Technology Sdn. Bhd. (SST)

- ✓ A wholly owned subsidiary of SIRIM Berhad is one of the largest calibration laboratory in Malaysia.
- Address
Bangunan Sirim, Lot 802, Jalan Demak Laut 2, Taman Perindustrian Demak Laut, Peti Surat 2885, 93756 Kuching, Sarawak.
- Phone: 082-432480
- Email: steven@sirim.my

Job Scope & Experiences

- Customer Services
- Equipment's Registration
- Calibration In Lab
- Calibration Onsite

Supervisors' Details

- Industry
Sir Steven Anak Harry
Branch Executive
Sirim Standards Technology
Kuching Branch
- Faculty
Dr. Naji Arafat Bin Haji Mahat

Instruments & Equipment Calibrated

- Balances
- Pressure Gauge
- Thermohygrometer
- Digital Thermometer
- Min-Max Thermohygrometer
- Chiller and Freezer
- Oven
- Temperature Recorder
- Hybrid Recorder
- Standard Weight
- Dial Indicator
- Centrifuge
- Auto Marshall Stability Test Controller
- Electromechanical Universal Testing Machine
- Data Logger + Probe

Standard Used for Calibration

- Data Logger
- Standard Weight
- Pressure Module
- Documenting Process Calibrator
- Dial Calibration Tester
- Multi-Product Calibrator
- Temperature and Humidity Chamber
- Digital Tachometer
- Marshall Compression Frame
- Load Cell with Indicator

Name: Pui Wei Wei
Course: 3 SSCC
Matric No: A16SC0236

INDUSTRIAL TRAINING

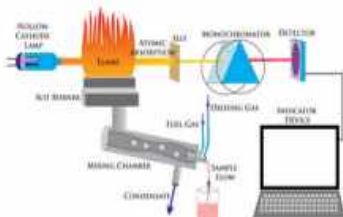


COMPANY BACKGROUND

Chemsain Konsultant Sdn Bhd was founded in 1984 by Mr.Chan Woon Peng. It provide various of laboratory testing services such as chemical test and microbiological test. The Chemsain laboratories are accredited with ISO 17025 for standard calibration and testing.

MICROBIOLOGICAL ANALYSIS

In microbiological laboratory, we often test for the presence of coliform in water sample. Total coliform test is the most basic test for bacterial contamination of a water supply.

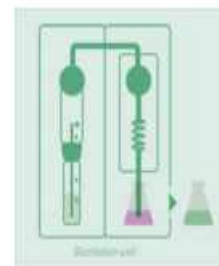
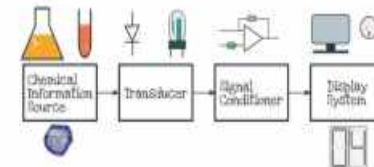


HEAVY METAL ANALYSIS

Atomic Absorption Spectroscopy is used to determine the heavy metal in the water sample. There are two types of FAAS in the laboratories which are Direct Air-Acetylene Flame AAS and Nitrous Oxide-Acetylene Flame AAS.

NITRATE AND NITRITE

Nitrate and nitrite can be measured colorimetrically by UV-Vis spectrophotometer. Nitrate is undetectable as it is colourless and odourless. Therefore, nitrate is reduced to nitrite by cadmium.



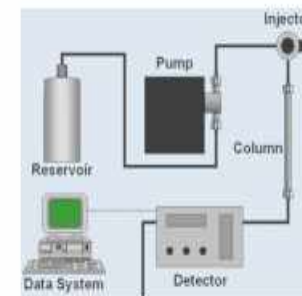
AMMONIACAL NITROGEN (AN)

AN is a measure for the amount of ammonia. AN test is used as a measure of the health of water in natural bodies such as rivers or lakes, or in man made water reservoirs.

HPLC AND GC

HPLC instrumentation has been used to determine chemical in food samples such as sugar profile, benzoic acid, sorbic acid and etc.

GC instrumentation is suitable for volatile analyte such as acetone and halogenated compound.



SARAWAK BIODIVERSITY CENTRE



PERSONAL INFORMATION

NAME: SITI KHADIJAH BT PIEL

YEAR/COURSE: 3/ INDUSTRIAL CHEMISTRY (SSCC)

INDUSTRIAL SUPERVISOR

MISS MELISSA CHANG MAY FUNG
RESEARCH OFFICER



FACULTY SUPERVISOR
DR NAJI ARAFAT MAHAT
LECTURER OF CHEMISTRY DEPARTMENT



INSTRUMENTATION



High-performance liquid chromatography (HPLC)



Liquid chromatography-mass spectrometry (LCMS)



EXPERIENCES

The importance of integrity

Developed self-confidence

Gained new theoretical & practical skills

Learnt about professionalism in work environment



LiSara production



Expreince in Molecular Biology lab



Expreince in plant preparation lab



Attending integrity talk by PDRM (Pj Chang Ching)

using rotary evaporation to concentrate the sample by removing the solvent

ACTIVITIES



doing open column chromatography



SABAH

YANMAR KOTA KINABALU R&D CENTRE (YKRC)



YKRC

- established in 2008.
- research institute of an Osaka-based company, Yanmar.
- Chemistry-related groups:
 1. Sustainable Solution Create group (research)
 2. Analysis Group (analysis & QC)

Location:

Lot 11&12, IZ4, Jln. KKIP 1G, KKIP Selatan,
88450 Kota Kinabalu Industrial Park,
Sabah, Malaysia.
Office No.: 088-496777



YKRC ANALYSIS GROUP

- has an ISO17025 accredited laboratory.
- equipped for fuel and lubricant analysis.
- Operation: Receive samples from Engine Group and Sustainable Solution Create Group, run analysis, produce test report.

WHAT I LEARNT

1. Run 12 types of analysis
2. Waste disposal (Code labeling & Waste Disposal)
3. Control Charts (Shewhart & Moving Range Chart)
4. Measurement Uncertainty Test
5. Standard method and test method

EQUIPMENT

1. Rancimat (Oxidative Stability)
2. FTIR (Functional Groups)
3. Bomb Calorimeter (High Calorific Value)
4. Titrino (Acid Number, Base Number, Iodine Value & Peroxide Value)
5. Coulometer + Karl Fischer Evaporator (Water Content)
6. Density Meter (Density)
7. Multiflash (Flash Point)
8. Micro Carbon Residue Tester (Carbon Residue)
9. ICP-OES (Multielemental Analysis)

*also available in lab: GC-FID

JABATAN KIMIA MALAYSIA NEGERI SABAH (INDUSTRY SECTION)



Jabatan Kimia Malaysia Negeri Sabah, Rose Garden, Jalan Penampang, 88300,
Kota Kinabalu, Sabah

VELORRA PRISKA NAISUN
3 SSCA

INSTRUMENTATION

SUPERVISORS

INDUSTRY : MR DICKENS WONG VUI FOO
FACULTY : MR ANTHONY NYANGSON @
MOHD DANIEL



GC-NPD



HPLC



AAS



PORTABLE FTIR

ANALYSIS

1. Determination of dithiocarbamate in Food Crops by Visible Spectrometric Method
2. Analysis of tobacco leaves and cloves
3. Analysis of Mitragynine in 'Ketum' leaves using LC- MSMS
4. Determination of Nicotine in Cigarettes
5. Determination of Heavy Metals in water by Atomic Absorption Spectroscopy
6. Determination of gases of Liquefied Petroleum Gas (LPG) by GC-MS
7. Detection of Mineral Oil in Edible Oil
8. Determination of compounds using portable FTIR

CUSTOMERS

POLICE DEPARTMENT, MINISTRY OF HEALTH,
CUSTOMS DEPARTMENT, ARMED FORCES,
COMMERCIAL

TRAINING SCOPES

CALIBRATION, SAMPLING, PREPARATION OF
STANDARD SOLUTION, ANALYSIS

ACTIVITIES

EXHIBITION, ISO 45 001 COURSES

Internship at *Twinine*



RISMAHWATI BINTI MALIYANG
A16SC0241
3SSCC

Supervisors

Faculty : Mr. Mohd Daniel Nyangson
Industry : Miss Wong Nyuk Chuk

About the Industry

Name : Twinine Sdn. Bhd.
Address : Lot 14, KR Industrial Park,
Kampung Hungab,
88300 Penampang,
Kota Kinabalu, Sabah.



Madam Wong, the Director of Twinine Sdn. Bhd. (number 3 from the right) in receiving the Sabah Industry Excellence Award (SIEA) 2014/2015 for Local Company with annual sales less than 10 million.

Mixers used to mix the ingredients.



Pouring the preservative into the cooking tank.



This is how the sauces should be arranged on a pallet.



This is how the arrangement looks like.



Winner for the Staff Development Program (July) with the Manager, Miss An Wong (on the left) and the Director, Madam Wong Yoke Sim (on the right)

Examples of packaging used





OVERSEAS

INTRODUCTION

Nanoparticles have been very popular in term of its research due to its wide use and application like cosmetic, health care, environmental health, etc.

Silver nanoparticles have been chosen as the nanoparticles of interest because of its unique properties which helps in antimicrobial application, biosensor materials, medicine, dentistry application, etc.

Formylation of amines is an important method of protecting a wide variety of amines and amino acids. The products, formamides, are important intermediates in organic synthesis and have been widely used in the synthesis of pharmaceuticals.

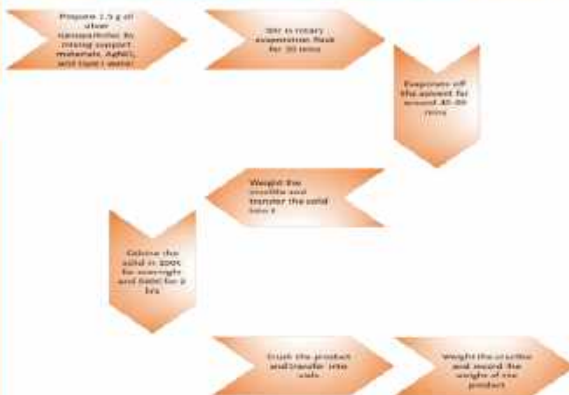
Reaction equation:



OBJECTIVES

1. Be able to prepare silver nanoparticles using various method
2. Be able to use silver nanoparticles N-formylation
3. Be able to identify N-formylation products

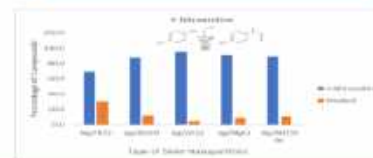
PREPARATION OF CATALYST



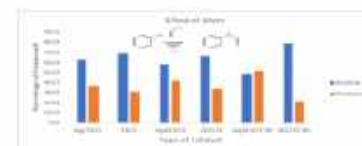
CATALYSIS OF N-FORMYLATION



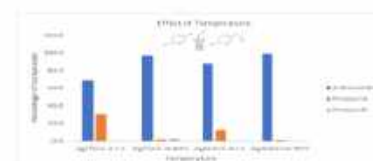
RESULTS



In this experiment, 4-nitroaniline was used to undergo N-formylation. Different type of support materials were used which were TiO₂, Al₂O₃, MgO, ZrO₂ and Al₂O₃ 90. There are 3 supporting materials that were selected which are TiO₂, Al₂O₃ and Al₂O₃ 90. This is because these three supporting materials yielded a quite significant amount of product as compared to the other supporting materials.



Based on the graph above, it can be seen that there is a difference between the presence of silver. Significantly, by using Al₂O₃ 90 as the supporting material, the product produced from aniline was more than the absence of silver. It shows that silver helps in yielding more products.



This graph shows the effect of temperature on the reaction of 4-Nitroaniline. Room temperature and 80°C were two temperature that were used as the indicator in this experiment. As can be seen from the graph, the high temperature does not give a good yield of product. This shows that the reaction does not need more energy to help the conversion to N-formylation. This can be supported by analysing the Ag/TiO₂ bar. 80°C yielded lesser product as compared to doing it in the room temperature.



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SINGAPORE 118221



NATURE OF BUSINESS ?

- Testing & Product Certification
- Auditing & System Certification
- Training
- Inspection
- Knowledge Services



INDUSTRIAL TRAINING

Hi! I'm FARAH DAYANA BT MAHAD from 3 SSCC, A16SC0047

LABORATORIES

CONSISTS OF 3 CHEMICAL LABORATORIES



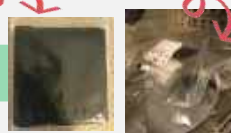
1. INSTALLATION QUALIFICATION CHECKLIST

FTIR-ATR 2. SAMPLE



3. CONCENTRATION OF VOC IN CAR PARTS

SAMPLING BAG



4. SOLID PHASE EXTRACTION



MICRO-CONTAMINATION LAB

Deals with testing to determine :

- VOC and formaldehyde concentration in car parts.
- Active ingredients in mosquito nets.

Uses method/instrument such as :

- ATD-GCMS
- LCMS



FOOD LAB

Deals with testing to determine :

- Sugar content in foods such as salted egg crackers.

Uses method/instrument such as :

- Titration
- HPLC



COATING LAB

Deals with testing to determine :

- Emitted formaldehyde concentration in paint at room temperature or normal room condition.

Uses method/instrument such as :

- Environmental Chamber

ACTIVITIES



MENTOR

MISS MARIANA



INDUSTRY SUPERVISOR

DR XIAO ZHOU



FACULTY SUPERVISOR

DR YAP YUNG SZEN

LIST OF SSCA & SSCC STUDENTS

PROGRAM	NAME	ADDRESS OF COMPANY	DISTRICT	STATE
SSCC	SITI ASMIDAR BINTI CHE RUS	NEGERI SEMBILAN CEMENT INDUSTRIES SDN. BHD. BUKIT KETRI, MUKIM CHUPING 02450 KANGAR PERLIS	KANGAR	PERLIS
SSCC	NURSYAZA LIYANA BINTI ZAINI	SAFETYWARE SDN. BHD. PLOT. 237, LENGKOK PERINDUSTRIAN BUKIT MINYAK 3 BUKIT MINYAK INDUSTRIAL ESTATE 14100 SIMPANG AMPAT PULAU PINANG	SIMPANG AMPAT	PULAU PINANG
SSCA	MUHAMMAD SYAZWAN BIN MOHD ZOHIR	MY CO2 SDN. BHD. 16, LENGKOK KIKIK 1 TAMAN INDRAMASIH 13600 PERAI PULAU PINANG	PRAI	PULAU PINANG
SSCA	ANG ZHENG YEN	ACUMEN SCIENTIFIC SDN. BHD. PLOT NO. 256 TINGKAT PERUSAHAAN 5 KAWASAN PERINDUSTRIAN PERAI 2 13600 PRAI PULAU PINANG	PRAI	PULAU PINANG
SSCA	RAMYIAH A/P GANESAN	TEXCHEM MALAYSIA SDN. BHD. PLOT 256, LORONG PERUSAHAAN 10 PRAI INDUSTRIAL ESTATE 13600 PRAI PULAU PINANG	PRAI	PULAU PINANG
SSCC	YEAP LON ER	EURO CHEMO-PHARMA SDN. BHD. 2408, LORONG PERUSAHAAN SATU PRAI INDUSTRIAL ESTATE 13600 PRAI PENANG	PRAI	PULAU PINANG
SSCA	TAN LIN LI	EURO CHEMO PHARMA SDN. BHD. 2408, LORONG PERUSAHAAN SATU KAWASAN PERINDUSTRIAN PRAI 13600 PRAI PULAU PINANG	PRAI	PULAU PINANG
SSCC	ANG HOCK TEE	MALAYSIA: AL ASIA CHEMICAL INDUSTRY SDN. BHD. PLOT 348, LORONG PERINDUSTRIAN BUKIT MINYAK 22 PENANG SCIENCE PARK, MUKIM 13 SEBERANG PRAI TENGAH 14100 PULAU PINANG	SEBERANG PRAI	PULAU PINANG

LIST OF SSCA & SSCC STUDENTS

PROGRAM	NAME	ADDRESS OF COMPANY	DISTRICT	STATE
SSCA	GOH PIN KUAN	EUROFINS NM LABORATORY SDN. BHD. 78 & 80, LORONG PERDA SELATAN 1 BANDAR PERDA 14000 BUKIT MERTAJAM PULAU PINANG	BUKIT MERTAJAM	PULAU PINANG
SSCA	KHEOH ZI HOON	EUROFINS NM LABORATORY SDN. BHD. 78 & 80, LORONG PERDA SELATAN 1 BANDAR PERDA 14000 BUKIT MERTAJAM PULAU PINANG	BUKIT MERTAJAM	PULAU PINANG
SSCA	NOOR AIDA FAZIRA BINTI MOHD SALLEH	JABATAN ALAM SEKITAR NEGERI PULAU PINANG ARAS BAWAH, WISMA PERSEKUTUAN SEBERANG PERAI UTARA 13200 KEPALA BATAS PULAU PINANG	KEPALA BATAS	PULAU PINANG
SSCC	TAN YEE MINH	HOVID BERHAD 121, JALAN TUNKU ABDUL RAHMAN 31550 IPOH PERAK	IPOH	PERAK
SSCA	NG WEI WEI	TOP GLOVE SDN. BHD. LOT 12, PERSIARAN TASEK KAWASAN PERSIARAN TASEK 31400 IPOH PERAK	IPOH	PERAK
SSCA	JEEVASANTHARI A/P GUNASEGARAN	LATEXX MANUFACTURING SDN. BHD. LOT 18374, JALAN PERUSAHAAN 3 KAMUNTING INDUSTRIAL ESTATE 34600 KAMUNTING PERAK	KAMUNTING	PERAK
SSCA	TAN HOOI PING	LIH MEI INDUSTRIAL SDN. BHD. PLOT 4180, JALAN PERUSAHAAN 3 KAMUNTING INDUSTRIAL ESTATE 34600 KAMUNTING PERAK	KAMUNTING	PERAK
SSCC	WAN AMIRA SYAHIRAH BINTI MOHD ARIFF	ALIRAN UTARA SDN. BHD. LOJI PEMBERSIHAN AIR GUNUNG SEMANGGOL SIMPANG EMPAT 34400 SEMANGGOL PERAK	SEMANGGOL	PERAK

LIST OF SSCA & SSC STUDENTS

PROGRAM	NAME	ADDRESS OF COMPANY	DISTRICT	STATE
SSCC	NUR SYUHADA BINTI HAMZAH	AIR ASIA BERHAD LCC TERMINAL, JALAN KLIA S3 SOUTHERN SUPPORT ZONE, KLIA 64000 SEPANG SELANGOR	SEPANG	SELANGOR
SSCC	NUR FATINI BINTI SAMSULKAHAR	AGENSI NUKLEAR MALAYSIA KOMPLEKS BANGI 43000 KAJANG SELANGOR	KAJANG	SELANGOR
SSCC	NURFARHANA BINTI SHUKRI	ALUMAC INDUSTRIES SDN. BHD. LOT 8463 KAMPUNG JAYA INDUSTRIAL AREA 47000 SUNGAI BULOH SELANGOR	SUNGAI BULOH	SELANGOR
SSCA	LIM KE YING	SGS (MALAYSIA) SDN. BHD. LOT 4, PERSIARAN JUBLI PERAK SEKSYEN 22 40300 SHAH ALAM SELANGOR	SHAH ALAM	SELANGOR
SSCA	NUR AIESHA BINTI MOHD FADZIL	SGS (MALAYSIA) SDN. BHD. LOT 4, PERSIARAN JUBLI PERAK SEKSYEN 22 40300 SHAH ALAM SELANGOR	SHAH ALAM	SELANGOR
SSCA	TEY CHEN HAN	SGS (MALAYSIA) SDN. BHD. LAB GENERAL CHEMICAL LOT 4, PERSIARAN JUBLI PERAK SEKSYEN 22 40300 SHAH ALAM SELANGOR	SHAH ALAM	SELANGOR
SSCC	CONNIE LEONG YING FANG	ACUMEN SCIENTIFIC SDN. BHD. WISMA TEXCHEM, LOT 808 & 809 JALAN SUBANG 5 TAMAN PERINDUSTRIAN SUBANG 47610 SUBANG JAYA SELANGOR	SUBANG JAYA	SELANGOR
SSCC	NURUL HIDAYAH BINTI SAPAR	KONG LONG HUAT CHEMICALS SDN. BHD. LOT 807, JALAN TELOK GONG KAMPUNG NELAYAN, TELOK GONG 42000 KLANG SELANGOR	KLANG	SELANGOR

LIST OF SSCA & SSCC STUDENTS

PROGRAM	NAME	ADDRESS OF COMPANY	DISTRICT	STATE
SSCA	AINA SYAHIRA BINTI ROSLI	KOSSAN LATEX INDUSTRIES (M) SDN. BHD. LOT 6129, JALAN HAJI ABDUL MANAN KAWASAN PERINDUSTRIAN MERU SELATAN 41050 KLANG SELANGOR	KLANG	SELANGOR
SSCA	ALBERTH ALIP	TOP GLOVE SDN. BHD. LOT 4969, JALAN TERATAI, 6TH MILES OFF JALAN MERU 41050 KLANG SELANGOR	KLANG	SELANGOR
SSCC	NURUL IZZATY BINTI RAMLY	SIME DARBY RESEARCH SDN. BHD. R & D CAREY ISLAND CHEMARA BUILDING, LOT 2664 JALAN PULAU CAREY 42960 CAREY ISLAND SELANGOR	PULAU CAREY	SELANGOR
SSCA	MUHAMMAD AMIRUL SOLIHIN BIN MAZLAN	SIME DARBY RESEARCH SDN. BHD. R & D CAREY ISLAND CHEMARA BUILDING, LOT 2664 42960 PULAU CAREY SELANGOR	PULAU CAREY	SELANGOR
SSCA	MUHAMMAD ASRAF BIN AHMAD ZAHIDI	SIME DARBY RESEARCH SDN. BHD. R & D CAREY ISLAND CHEMARA BUILDING, LOT 2664 42960 PULAU CAREY SELANGOR	PULAU CAREY	SELANGOR
SSCA	NUR ATIQA BINTI MAT HASAN	AGRI ASIA REFINERY 2258, JALAN HELANG KAMPUNG BATU 9, KEBUN BAHARU 42500 TELOK PANGLIMA GARANG SELANGOR	TELOK PANGLIMA GARANG	SELANGOR
SSCC	HARIHARAN A/L PANIRSELVAN	POLIS DIRAJA MALAYSIA MAKMAL FORENSIK PDRM BATU 8 1/2, JALAN CHERAS-KAJANG 43200 CHERAS KUALA LUMPUR	CHERAS	KUALA LUMPUR
SSCC	RUSSUHADAH BINTI IBRAHIM	S.E.H MALAYSIA SDN. BHD. LOT 2, LORONG ENGGANG 35 ULU KLANG FREE TRADE ZONE 54007 KUALA LUMPUR	ULU KLANG	KUALA LUMPUR
SSCC	NURFARINA SAHIRA BINTI ZAKARIA	VIA NATURA (M) SDN. BHD. (BIOKUBE PILOT PROJECT) 23A JALAN BANDAR 1 TAMAN MELAWATI 53100 KUALA LUMPUR	TAMAN MELAWATI	KUALA LUMPUR

LIST OF SSCA & SSCC STUDENTS

PROGRAM	NAME	ADDRESS OF COMPANY	DISTRICT	STATE
SSCC	MUHAMMAD FARHAN BIN MD YUSOP	MDD BEVERAGE SDN. BHD. LOT 144 & 145 SEMAMBU INDUSTRIAL ESTATE 25350 KUANTAN PAHANG	KUANTAN	PAHANG
SSCC	NUR ALWANI BINTI ABDULLAH	SYARIKAT AIR TERENGGANU SDN. BHD. LOJI RAWATAN AIR KEPONG 1 (SATU) 20200 KUALA TERENGGANU TERENGGANU	KUALA TERENGGANU	TERENGGANU
SSCA	NUR SHAFIQAH BINTI MD YUNAN	AIR KELANTAN SDN. BHD. LOT PT 8731, HS (M) 8584 KOMPLEKS APAM PUTRA BANDAR BARU PASIR MAS LUBOK JONG 17000 PASIR MAS KELANTAN	PASIR MAS	KELANTAN
SSCC	NUR ATIQA H BINTI RAZALI	AIR KELANTAN SDN. BHD. WISMA AIR KELANTAN LOT 188, JALAN KUALA KRAI BANDAR KOTA BHARU 15050 KOTA BHARU KELANTAN	KOTA BHARU	KELANTAN
SSCC	RISMAHWATI BINTI MALIYANG	TWININE SDN. BHD. LOT 14, KR INDUSTRIAL PARK KAMPUNG HUNGAB 88300 PENAMPANG KOTA KINABALU SABAH	KOTA KINABALU	SABAH
SSCA	KAREN CHAN MEI MEI	YANMAR KOTA KINABALU R&D CENTER LOT 11 & 12, IZ4, JALAN KKIIP 1 G KKIP SELATAN 88450 KOTA KINABALU SABAH	KOTA KINABALU	SABAH
SSCA	VELORRA PRISKA NAISUN	JABATAN KIMIA MALAYSIA CAWANGAN NEGERI SABAH ROSE GARDEN, JALAN PENAMPANG 88300 KOTA KINABALU SABAH	KOTA KINABALU	SABAH

LIST OF SSCA & SSCC STUDENTS

PROGRAM	NAME	ADDRESS OF COMPANY	DISTRICT	STATE
SSCC	CINDY CHONG WEI XYN	CHEMSAIN KONSULTANT SDN. BHD. 172 ROCK ROAD 93200 KUCHING SARAWAK	KUCHING	SARAWAK
SSCC	PUI WEI WEI	SIRIM STANDARD TECHNOLOGY SDN. BHD. LOT 802, JALAN DEMAK LAUT 2 TAMAN PERINDUSTRIAN DEMAK LAUT 93756 KUCHING SARAWAK	KUCHING	SARAWAK
SSCC	SITI KHADIJAH BINTI PIEL	SARAWAK BIODIVERSITY CENTRE KM20 JALAN BORNEO HEIGHTS,SEMENGOH LOCKED BAG NO 3032 93990 KUCHING SARAWAK	KUCHING	SARAWAK
SSCA	NURKHALIFAH BINTI MATJISIN	JABATAN KIMIA MALAYSIA CAWANGAN BINTULU, SARAWAK JALAN TUN RAZAK 97007 BINTULU SARAWAK	BINTULU	SARAWAK
SSCA	MOHAMAD FAIQ BIN FARIED	KING MONGKUT'S UNIVERSITY OF TECHNOLOGY THONBURI 126 PRACHA UTHIT RD. BANG MOD, THUNG KHRO BANGKOK 10140 THAILAND	BANGKOK	THAILAND
SSCC	FARAH DAYANA BINTI MAHAD	TUV SUD PSB PTE. LTD. 1, SCIENCE PARK DRIVE 118221 SINGAPORE	SCIENCE PARK DRIVE	SINGAPORE

The End

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