

# **Talk on**

# **Route to Become MIEM/PE**

## **(PI Interview Session)**

**Ir. Hisham Yahaya**

Member of IEM-PI Board

Member of BEM-Application Board

# About the Speaker

## Ir. Hisham Yahaya

- ❑ Having more than 30-years work experiences; 5-years in power generation industries with LLN and 11-years in Oil & Gas industries with Shell.
- ❑ Started own business in 2001, doing contracting, consulting, training mainly in Oil & Gas industries. In the last 5-years, involved in asbestos abatement.
  - 2001-2014: TECHNO MATRIX RESOURCES SDN BHD
  - 2010-present: SAFE ASBESTOS SOLUTIONS SDN BHD
  - 2012-present: PURPLE KNIGHT SOLUTIONS (formerly TMR CONSULT)
  - 2015-present: LINDENWOOD CONSULT SDN BHD
  - Since 2003: involved in IEM, BEM, MOGSC, MIHF and universities IAP.
- ❑ Certified Facilitator for NOSS-DESCUM by DSD-MOHR.
- ❑ Ice hockey; Vice President of MIHF and Team Manager for SEA Games-2017 Men's National Team.

# Presentation Topics

## ☐ Introduction

- ☐ PI Interview Process: Oral Interview
- ☐ Mistakes made by Candidate during Interview
- ☐ Questions & Answers Session

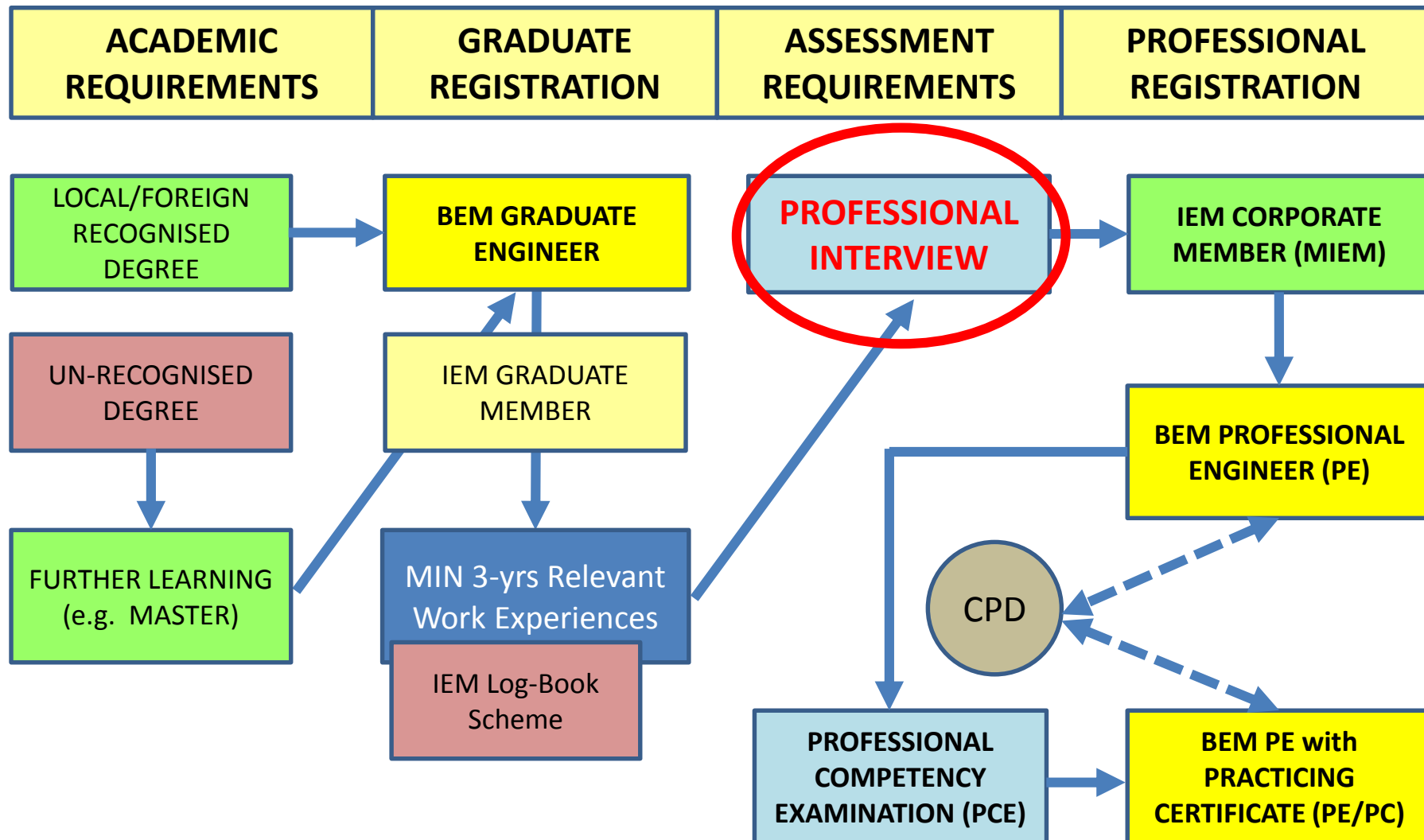
# Introduction

## *Objectives...*

At the end of the Talk, all are expected to be familiar on:

- ☐ what happens during PI interview
- ☐ typical failure areas during interview

# Route to Become MIEM/PE



# Presentation Topics

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# PI Interview

❑ The Interview comprises of;

✓ Oral Interview

✓ Essay Writing; 2 essays

❑ **Not in discussion:**

❖ Training and Experiences Report

❖ Project Report

# PI: Oral Interview

- Questions asked based on;
  - Training & Experiences Report;
  - Technical or Project Report;
  - Basic engineering knowledge pertaining to the subject matters within the line of experiences.
- Duration: 30-60 minutes



# PI: Oral Interview

- Intended to assess the Candidate's:
  - ❖ Design experience: understanding with full participation;
  - ❖ Site/field experience: degree of exposure and effective participation;
  - ❖ Management experience: capability to organize assignment and accept responsibility;

# PI: Oral Interview

- Intended to assess the Candidate's:
  - ❖ Engineering application: resourcefulness, ingenuity in giving solution with sound fundamentals;
  - ❖ Maturity of thought: development of professionalism, ability to focus on material issues rather than personal and petty matters;

# PI: Oral Interview

- Intended to assess the Candidate's:
  - ❖ Communication skill: ability to communicate verbally and clarity in speech;
  - ❖ Professional responsibility: capability to accept professional responsibility, have accountability, not passing the buck and blame others;
  - ❖ Ethical judgment in the conduct of works: integrity and good governance;

# PI: Oral Interview

- Intended to assess the Candidate's:
  - ❖ Awareness of engineering sustainability, health and safety issues;
  - ❖ The Candidate will be required to show that:
    - a. he can apply in practice, the theory of at least one of the branches of engineering science, and;
    - b. has acquired an understanding of the fundamental processes of research, investigation, planning, analysis, design and construction.

# PI: Oral Interview

- **WHAT INTERVIEWERS NORMALLY ASK !!**

- ✓ What has the candidate done!
- ✓ Why has he done it!
- ✓ Does he fully understand what he has done!
- ✓ What engineering decisions he has made!
- ✓ What investigations and considerations were undertaken to reach the conclusion!

# PI: Essay Writing

- Two (2) essays have to be written;
  1. SECTION-A: Technical
    - training & experiences
    - technical report
    - basic engineering
  2. SECTION-B: Code of Professional Conduct
    - regulations on professional conduct
- Duration: 1 ½ hours each

# PI: Essay Writing

## SECTION-A

- ☐ Basic engineering knowledge
- ☐ Professionalism of candidate
  - ✓ Experience in design works
  - ✓ Experience in site works
  - ✓ Project work

# PI: Essay Writing

## SECTION-B

- ❑ Candidates are to demonstrate:
  - ❑ an understanding of the professional code of conduct;
  - ❑ his understanding of the ROLE of engineers in the Society vis-à-vis his professional Code of Conduct;
  - ❑ he can write and present in a clear and concise manner.



# PI: Essay Writing

- Preparation for the Essays;
  - ✓ Should have good understanding of the issues relating to the topics;
  - ✓ Can be developed through good experience, exposure to the problems and issues at work;
  - ✓ Reading regularly on these issues; and
  - ✓ Participating in professional activities, seminars, talks, forums etc.

# PI: Essay Writing

- Preparation for the Essays;
  - ✓ Candidates need to pay attention to language, grammar, format, content and style
  - ✓ WHY...Engineers have to write reports too

# Presentation Topics

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# PI: Assessment of Candidates

DOCUMENTATION			
Description of Section	Description of Field	Results	General remarks on Candidate's strength and weaknesses, and reasons for awarding any "NS" (if any)
DOCUMENTATION: Report on Training and Experience	Duration of Training		
	Quality of Training		
	Site/Field Experience		
	Design Experience		
	Quality of Report		
	Adequacy of Report		

# PI: Assessment of Candidates

DOCUMENTATION			
Description of Section	Description of Field	Results	General remarks on Candidate's strength and weaknesses, and reasons for awarding any "NS" (if any)
DOCUMENTATION: Project Report, Thesis or Feasibility Study	Presentation		
	Calculations		
	Drawings		
	Quantities		
	Specifications		

# PI: Assessment of Candidates

ORAL INTERVIEW			
Description of Section	Description of Field	Results	General remarks on Candidate's strength and weaknesses, and reasons for awarding any "NS" (if any)
ORAL INTERVIEW: Technical Knowledge	Design Experience (Understanding with full participation)		
	Site/Field Experience (Degree of exposure)		
	Management Experience (Capability to organise assignment and accept responsibility)		
ORAL INTERVIEW: Professional Skill	Engineering Application (Resourcefulness, etc)		
	Communication Skill (Ability to communicate)		
ORAL INTERVIEW: Personal Attitude	Maturity of Thought (Development of professionalism)		
	Professional Responsibility (Capability to accept professional responsibility)		

# PI: Mistakes by Candidates

- ❑ Not able to express himself/herself on the project details;
  - ✓ Not done by him/her;
  - ✓ Forgotten: too many years ago;
  - ✓ Scope too wide: focus on involvement;

# PI: Mistakes by Candidates

- ❑ Lack of design experiences;
  - ✓ Not able to explain computer computation manually; such as input parameters, design thresholds;
  - ✓ If there are design assumptions, not able to provide explanations;
  - ✓ If there are design options; not able to explain reasons for the chosen design.



# PI: Mistakes by Candidates

## ❑ Lack of site experiences;

- ✓ Not able to explain some of site issues such as safety, quality or change of work scope;
- ✓ Not able to describe communications during team meetings such as toolbox meeting, work instructions or Job Safety Analysis (JSA);
- ✓ Management of contractor's manpower such as work deliverables or work schedule.

# PI: Mistakes by Candidates

- ❑ Lack of engineering management skills; lack of maturity of thoughts;
- ✓ Not able to explain reasons behind some of site decisions made;
- ✓ How he/she cope with site arguments such as different options to execute works;
- ✓ Management of site work delays, change of work scope, shortage of manpower/materials.

# PI: Mistakes by Candidates

- ❑ Lack of communication skills.
  - ✓ Mixing between English and Malay languages during oral interview;
  - ✓ Too long-winded in explanation; cannot be understood;
  - ✓ No confident in explanation.

# PI: Assessment of Candidates

ESSAYS	
Description of Section	Results
Section A: Technical Essay	
Section B: Code of Ethics	
Overall Comments by Interviewers:	

# PI: Mistakes by Candidates

- ❑ Too short; not able to express his/her thoughts;
- ❑ Cannot explain effectively on project works for Section-A essay such as design or site management;
- ❑ Not able to convey good argument for Section-B essay topic;
- ❑ Full of spelling or grammar mistakes.

# PI: Assessment of Candidates

INTERVIEWERS' RECOMMENDATION		
Recommendation (Please indicate "Pass" or "Fail" in box provided)		<div></div>
<p>Overall Comments by Interviewers:</p> <div> <p><b>Should Candidate having any of the categories as "NS", the recommendation must be a "FAIL"</b></p> </div>		
Name of Interviewers	Membership No.	Signature of Interviewers
1)		
2)		

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*Thank you*