

# Visits to Iron Ore Producer and Royal Malaysian Navy

PROJECT MANAGEMENT TECHNICAL DIVISION



reported by  
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**Ms. Prema Sivanathan** has a B.S. degree in Metallurgical Engineering from Universiti Malaysia Perlis (2012) and Materials Research Aalen University, Germany (2011). She is currently a committee member for PMTD and has about 3 years of working experiences in industries.

The Project Management Technical Division (PMTD), IEM organised visits to Vale Malaysia Mineral Sdn. Bhd. and the Royal Malaysian Navy (RMN) on 26 and 27 February, 2016, respectively to understand and learn about project implementation in these two organisations. More than 30 IEM members took part in the events.

We left the Institution of Engineers, Malaysia in Petaling Jaya by bus on 26 February, morning led by PMTD chairman (session 2015/2016) Ir. Dr Ahmad Anuar B. Othman and six other committee members. We arrived at Teluk Rubiah Maritime Terminal at about 3p.m. after Friday prayers. Waiting for us at the entrance of the main gate was Mr. Faizal Mohamed Ariff, Pre-operation and Quality Specialist at Vale. Before the visit proper, we were given a safety briefing by a Vale safety officer.

## SITE VISIT TO VALE

Vale is the world's biggest producer of iron ore and pellets, essential in the manufacturing of steel. Iron ore is found in nature in the form of rocks mixed with other elements.

After going through various industrial processes that incorporate cutting-edge technology, iron ore is processed and sold to steel companies. Iron ore, as a component of final products, can be found in houses, cars and household appliances.

Vale is investing in technological innovations and developing initiatives to prevent and minimise environmental impacts that mining causes. Vale also aims to set the benchmark in the sustainable management and the use of natural resources.

## SITE VISIT TO RMN LUMUT

On the second day, we visited a Royal Malaysian Navy warship where we were briefed on engineering as well as project management practices conducted by Royal Malaysian Navy (RMN).

A RMN warship is usually maintained by engineering personnel and involved various



Safety briefing at Vale Malaysia



RMN deep diving demonstration at Diving Centre.



Lt Kdr Ir. Lee J.J (left) is involved in the development of project management syllabus, incorporating PMP knowledge into the training module

disciplines such as weapons, electrical, mechanical and marine engineering. Duties include preventive maintenance and corrective maintenance, involving equipment usage upkeep and operational routines.

A warship consists of many systems and equipment such as:

- propulsion system (main engines, gearboxes, shafting arrangement, propeller)
- power generations (prime movers, alternators, switchboard, distributors)
- hotel services system (air conditioning, ventilations, heaters, fresh water system, sewage treatment plant, sanitary system, galley equipment)
- damage control system (firefighting equipment, fire alarms)
- communication system (radios, military communications)
- sensors (navigation radars, surveillance radars, sonar),
- combat systems (guns, missiles, torpedoes, fire control system)

Project (non-operational routine) management:

- defect rectification & maintenance
- emergency repairs
- ship refit (major maintenance in dockyard)

Today, RMN is giving emphasis to good project management practices where young engineers are introduced to project management during the early stages of their career training.

We also visited the diving and mine warfare headquarters where we watched demonstrations of deep diving and salvage and underwater welding, conducted in the centre's deep pool. ■