

## Sarawak Shell Berhad Participation in ICPER Seminar by Universiti Teknologi PETRONAS



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Date: 13<sup>th</sup> – 15<sup>th</sup> July 2021  
Venue: Virtual

The 7<sup>th</sup> International Conference on Production, Energy and Reliability (ICPER 2020) was held virtually online from 13<sup>th</sup>-15<sup>th</sup> July 2021 in view of the on-going Covid-10 pandemic. The conference was organized under the umbrella of the World Engineering, Science and Technology Congress (ESTCON), Universiti Teknologi PETRONAS since 2021.

This conference aimed to gather researchers and industry practitioners to share new ideas, research results and development experiences towards

sustainable Industrial Revolution 4.0 (IR 4.0). This era of digitization adoption by many industries will disrupt the current production and manufacturing landscape.

ICPER 2020 discussed the impacts of this disruption and how the industry could utilise new technologies such as autonomous systems in manufacturing, advanced energy management and renewable energy as well as the implementation of big data analytics to monitor production lines.

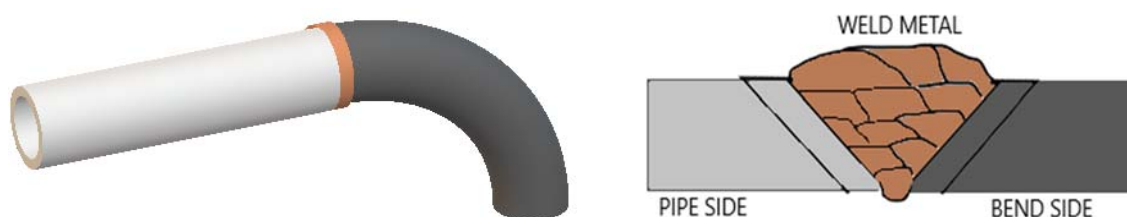
There were four (4) topics presented by Sarawak Shell Bhd (SSB):

- Coatings Solution for Fabric Maintenance by Mr. Arif Sukur (Figure 1)



**Figure 1:** Some common coating failures seen offshore are blistering, paint sagging and hard to reach areas. It is important to continue to explore new coating technology such as thin-film technology to provide more advantages over conventional coating systems in term of surface tolerant, humidity level and etc.

- Optimization of Pipeline Welding Qualification Production & Effective Field joint Coating (FJC) Application by Mr. Ir. Edment Fashah bin Ahamad (Figure 2)

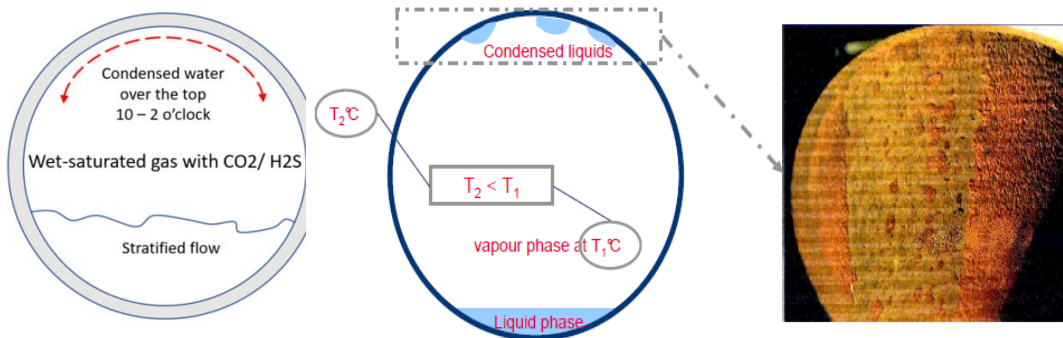


**Figure 2:** Qualification for bend to pipe welding to cover welding for pipe-to-pipe section effectively reduces the number of WPR/ WPS required before the fabrication. This leads to time and cost reduction.



**Figure 3:** Innovative and Effective Field Joint Coating using Visco Elastic Self- Healing Product is a new technology that provides reliable and fast application during pipelay activity. It is a cold application without the need of hot source such as fire torch.

- Challenges in Managing Top of Line Corrosion (TLC) in Multiphase Wet Gas Pipeline by Mr. Leow Chun Ho



**Figure 4:** Top of Line Corrosion (TLC) happens due to water condensation, presence of CO<sub>2</sub>/H<sub>2</sub>S, organic acids, stratified wavy flow and mainly at the top position, 10 to 2 o'clock position. Various mitigations methods were discussed such as insulation, material selection, batch inhibitors and volatile corrosion inhibitors. Each of these methods has its own pros and cons.

- Fuel Gas Pre-Heater Recovery on Fire Incident by Mr. Tee Jvn Yi



**Figure 5:** Level 2 Fitness for Service Assessment has been conducted together with the company, inspectors and 3rd party specialist. Metallurgical analysis of the ruptured gas preheater including visual inspection, fractographic, hardness, ferrite, SEM analysis, etc

All the topics presented were based on the actual experience in the field. The virtual presentations went smoothly with interactive questions and answers session by both the presenters and participants.

## Daulat Tuanku

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Sembah Takzim daripada



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## HIGHLIGHTS

IMM Student Chapter

Addressing the Issues of Significant Figures for Degree of Similarity and Specific FTIR Fingerprint Regions for Paints: A Pilot Study

Predicting the Whiteness Index of Cotton Fabric with a Least Squares Model



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