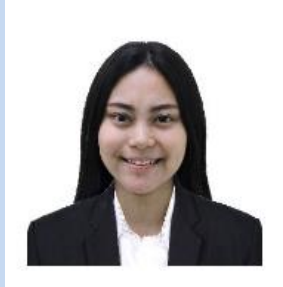


CURRICULUM VITAE

ORGANIZATION ASSIGNMENT		MISS. RUJAPA PHUMPHUK
Position	Corrosion Engineer	
Department	Plant Inspection	
Hired Date	August 16, 2019	
		

Professional Qualification			Employee ID 26008472
From	To		
Aug 2015	May 2019	B.Eng. in Material and Production Engineering	King Mongkut's University of Technology North Bangkok

Area of Expertise

- Failure Analysis
- Corrosion Under Insulation Inspection Management
- Risk Based Inspection

Summary of Experience

As a corrosion engineer, I have an experience in the fields of materials/corrosion and risk base inspection for petrochemical for 4 years including corrosion loops and corrosion control manuals preparations, root cause failure analysis and corrosion under insulation inspection management.

Work Experience			
From	To	Company	Position
Aug 2019	Present	GCME	Corrosion Engineer
<ul style="list-style-type: none"> • Project Name: Root Cause Failure Analysis <ul style="list-style-type: none"> • BST: Root Cause Analysis for Cracked Sampling Tube 10AT103 • Solvay: Failure Analysis for Leak Static Mixer (X1861) • Vinythai Public Company Limited: Failure Analysis for Cracked Thermowell P134/2 J 			

- Thai Ethoxylate Company Limited: Inspection Consulting and Recommend Repair Procedure for Stiffener Jet Tube
- PTT Asahi Chemical Company Limited (PTTAC): Leaked Superheater (GE-530)
- PTT Asahi Chemical Company Limited (PTTAC): Cracked Gas Sparger (AR-110C)
- AGC Vinythai: Failure Analysis: Pipe weldment crack
- **Project Name: Corrosion Under Insulation Inspection Management**
 - Aromatics1 (PTTGC4): Assessment the susceptibility of equipment and piping prone to corrosion under insulation problem.
 - LLDPE (PTTGC11): Assessment the susceptibility of equipment and piping prone to corrosion under insulation problem.
 - Corbion: Assessment the susceptibility of equipment and piping prone to corrosion under insulation problem.
 - BTF&Jetty (PTTGC7): Consequence based CUI assessment
 - GCS: Consequence based CUI assessment
- **Project Name: Risk Based Inspection**
 - HMC Polymers Company Limited: Corrosion Loops and Corrosion Control Manuals Preparations of Equipment and Piping Systems.
 - Gas Separation Plant (GPPP Plant): Corrosion Loops and Corrosion Control Manuals Preparations of Equipment and Piping Systems.
 - Gas Separation Plant (GSP1 Plant): Corrosion Loops and Corrosion Control Manuals Preparations of Equipment and Piping Systems.
 - Gas Separation Plant (ESP Plant): Corrosion Loops and Corrosion Control Manuals Preparations of Equipment and Piping Systems.
 - Thai Oil Public Company Limited (ADIP): Corrosion Loops and Corrosion Control Manuals Preparations of Equipment and Piping Systems.
 - Solvay (Bangpoo) Specialty Chemicals Limited: Corrosion Loops and Corrosion Control Manuals Preparations of Equipment and Piping Systems.
 - PTT MCC Biochem Company Limited: Corrosion Loops and Corrosion Control Manuals Preparations of Equipment and Piping Systems.
 - Thai PET Resin Company Limited: Corrosion Loops and Corrosion Control Manuals Preparations of Equipment and Piping Systems.
 - Thai Oil Public Company Limited (ISOM): Corrosion Loops and Corrosion Control Manuals Preparations of Equipment and Piping Systems.
 - Thai Oil Public Company Limited (SRU): Corrosion Loops and Corrosion Control Manuals Preparations of Equipment and Piping Systems.

Training and Certification

- API 571 Damage Mechanisms Affecting Fixed Equipment in the Refining Industry, Organized by IDC
- API 571 - Corrosion and Materials Professional, American Petroleum Institute, Certificate.
- Corrosion Control in the Refining Industry, Organized by NACE
- Internal Corrosion (Level1), Organized by NACE
- Confined Space Training, Organized by NPC S&E.
- Kaizen, Organized by GCME.
- Workshop on Metallurgical Failure Analysis, Organized by MTEC
- Workshop on Failure Analysis of Bearing, Organized by SKF (Thailand) Limited
- Boiler Tube Failure Analysis, Organized by EGAT

Identified CUI Susceptible Locations by Applying the AI Predictive Models

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Keywords: Time-, risk-, and consequence-based strategies, CUI susceptible location(s), AI predictive models.

Corrosion Under Insulation (CUI) is a major concern in the petrochemical industry, causing safety issues, unplanned shutdowns, and significant financial losses. It occurs on the exterior surface of insulated metal components (such as pipes, tanks, or equipment). Water trapped between the insulation material and the metal surface can produce an environment and lead corrosion problems.

This talk will elucidate a holistic approach to manage CUI, focusing on time-, risk-, and consequence-based strategies. In addition, the integration of AI predictive models can be used to enhance CUI susceptible location(s) identification. This model utilizes historical data, environmental factors, and operating conditions to predict potential CUI locations. The implementation of AI predictive models contributes to the optimization of inspection and maintenance activities.