

MOHAMMAD SAIFUDDIN SANUSI

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Result-oriented and multilingual research engineer specializing in data analysis with a background in hydrogen fuel cell technology, customer service, mechatronics, polymer extrusion, green energy, sales, and management.

WORK EXPERIENCE

Testing & Research Engineer | Sydrgoen Energy Pte Ltd

June 2023 – Present

- Performing 500 hours durability, DFM, RA, FMEA, performance, and environmental testing on hydrogen fuel cells and PEM electrolyzer prototype.
- Leading Gas Chromatography sample testing, creating protocols that **improved data accuracy by 20%**.
- Scaling and transitioning products from **New Product Introduction to High Volume Production**.
- Formulating the catalyst formulation based on the cost and performance analysis.
- Managing projects including product sampling and leveraging 3D printing technology for rapid prototyping.
- Supporting **CE certification** of first hydrogen fuel cell product through testing and assembly collaboration with China team.

Process Engineer | Powerzone H2 Technologies Pte Ltd

Sept 2022 – June 2023

- Developed SOPs, BOMs, and managed the product development - design, manufacturing, and final packaging
- Established relationships with over 45 suppliers and handled inquiries from potential customers.
- Enhanced product visibility by **increasing booth traffic by 30%** through marketing strategies.

Associate Engineer | Kulicke & Soffa Pte Ltd

June 2021 – Sept 2022

- Troubleshoot and resolved complex mechanical, electrical, and process issues during equipment assembly and testing phases.
- Assembled and tested **2 wire bond machines** in under 4 hours, adhering to standard work instructions.
- Acted as a technical mentor, leading diagnostic processes on testing and calibration for machine components.

EDUCATION

UNIVERSITY OF MASSACHUSETTS AMHERST, USA | 2020

Bachelor of Science in Chemical Engineering

SKILLS

LANGUAGE	SOFTWARE	MACHINERY
• Malay	• Microsoft Office	• Polymer Extruder Machine
• English	• MATLAB	• Tensile Testing Machine
• Thai	• C++	• Eye Tracking Device
• Mandarin	• Aspen	• 3D Resin Printing
	• SQL	• AutoCAD
		• Rheometer
		• UV-Vis
		• Wire Bond Process Analytical
		• Gas Chromatography (GC)
		• High Performance Liquid Chromatography (HPLC)
		• Digital Scanning Calorimeter (DSC)