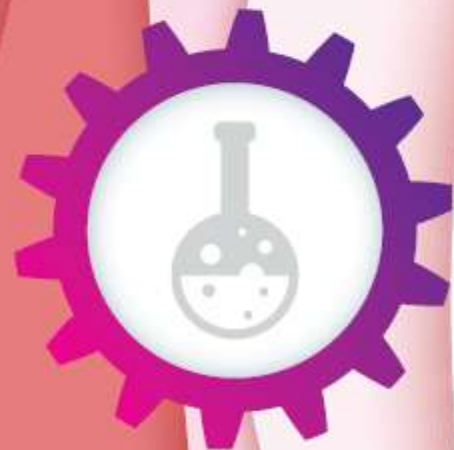


SETTING THE TREND FOR WOMEN ENGINEERS

Women engineers are making their mark in a field traditionally dominated by men. Many are responsible for nation building and some are setting a different trend for future professionals. In this edition of *JURUTERA*, we speak to five influential women whose dedication to engineering has made them forerunners in the industry. Not only have they excelled in their individual fields but they have also gone one step beyond. An engineer is just not about bolts and nuts, screws and spanners for fixing an engine and these women stand out as shining examples of professionals.





Ir. SUHANA ABDUL MAJID
CIVIL ENGINEER



MICHELLE LAU
CORROSION ENGINEER

A graduate from the University of Glasgow in Scotland, Suhana has more than 25 years' experience in the profession. Among others, her repertoire includes construction of the North-South Highway, the Kuala Lumpur International Airport project, the KTM rail project and the Klang Valley LRT.

At present, Suhana is Vice Chairman (1) of the IEM Women Engineer Section and Managing Director of Prestasi Perintis Sdn. Bhd., a C&S Engineering consulting firm.

Engineering was not her first choice for a career but still, she enrolled in a technical school and later graduated with a Bachelor's Degree in Engineering.

"I had worked with various companies as a professional engineer. But when life didn't go according to plan, I decided to set up my own business when I turned 47," she recalls.

Speaking of work-life balance, Suhana credits her family's support for her achievements. Not only is she blessed with spousal support but her mother and personal helper are also always available to help manage daily family matters. As for what keeps her going, she says her passion for the job has seen her through all obstacles.

She has dedicated to all women engineers the following poem written by her daughter:

I Am My Mother's Patience

Her motivation

Her strength to move forward

But most importantly

I am my Mother's daughter

And there is nothing more that I ask

But happiness for her instead

She is a corrosion engineer, one who specialises in the field of cathodic protection and Michelle Lau runs a company providing such expertise to the oil & gas, and energy production sector. According to her, it was her former employer who encouraged her to pursue a career in the field.

"I had a very nice boss who showed me the way although she herself wasn't an engineer. I was then working as a part-time clerk and my job was to sort out names of alumni members. My boss approached me and asked if I would be interested in a career in corrosion engineering," she recalls.

"She then told me to fax my resume to this company overseas which had a vacancy. Since then, I have never looked back."

Although that was how her career started, that is not where it is today. Just like Suhana, Lau realised that setting up business would be a good way to create more opportunities. That was 15 years ago. But for Lau, one thing that has not changed is that engineering remains the backbone of her successful business.

As she has a relatively young workforce, her advice to the younger generation is that active participation is important in all disciplines and ranks within an organisation.

"Being open and more interactive are necessary to allow your peers to share with you. Sharing sessions (sometimes, just via chat groups) are held to talk about anything and everything, from fun-after-work activities to challenges that someone may be facing in a certain project," she explains.

As for non-work-related matters, Lau says there are two activities that keep her focused and motivated.

"I spend time with an international association to advocate for awareness on corrosion to industry and the general public. Through such an avenue, I get to meet and network with people from various countries and different industries," she says.

Lau is also an avid cyclist and an archer, so naturally, her second distraction is the great outdoors.

"A calendar filled with such activities among work is my idea of work-life balance," she concludes.



**Ir. SHARIFAH AZLINA RAJA
KAMAL PASMAH**
CHIEF OPERATING OFFICER,
HSS ENGINEERS BHD.

A Civil Engineering graduate who earned her degree in the USA, Sharifah Azlina also has a Master's Degree in Business Administration. She sits on the committee of building SMART Malaysia, a council that drives the Building Information Modelling (BIM) agenda at national level. She has more than 26 years of experience in the field, particularly in project management services, with a focus on road and highway designs.

Speaking of why she had chosen this career path, Sharifah Azlina says: "I was in the pure science stream during my upper secondary years in school. During that time, I had limited exposure, unlike today's wealth of information at one's fingertips, and engineering appealed to me as the most attractive career to embark on."

As for advice to young engineers, the corporate head says: "Be result-oriented and set a yardstick to gauge yourself. Attitude is paramount, while skills can be learnt and developed."

To women aspiring to be engineers, she adds: "Build credibility early in your career although, needless to say, for most of us, hard work is inevitable. The ability to overcome challenges and to tackle complex issues is not developed overnight. However, no obstacle is insurmountable. Often, when you look at issues from different perspectives, you may get the answer or a clue to the solution."

Sharifah Azlina took a truly amazing and different path in August, 2016, when her company was public listed on the ACE Market of Bursa Malaysia. She says: "One of the more difficult tasks was educating the public and potential investors on the differences between a company which rendered consultancy services and a builder/contractor of an infrastructure or facility. While the public at large can easily recognise the functions of the builder and architect, the role of consultant engineers seems to be on the low-profile end of the construction industry's spectrum."

Yes, Sharifah Azlina is definitely a trendsetter who wears two hats: As a professional engineer and the Chief Operating Officer of a public-listed consultancy firm.



Ir. NURUL HUDA BINTI MAT NOR
ENVIRONMENTAL ENGINEER

Even as a freshman at University of Malaya, Nurul Huda was already committed to a career as an Environmental Engineer. "While working as an Environmental Engineer with Sime Darby Jomalina Sdn. Bhd., I furthered my studies at Universiti Teknologi MARA where I earned a Master's Degree in Environmental Engineering. Later, I continued with a Doctorate Degree in Engineering at University of Malaya with the aim of preparing myself to become a world-class Environmental Engineer," she says.

Nurul Huda says her husband keeps her motivated by telling her she must believe she is extraordinary. "Many of us stunt our own growth and we stop ourselves from getting what we want when we have a fixed mindset," she explains.

As an example, she cites how one day, while on a job, it dawned on her that industries needed people with creative minds. All that is required is to share with them and to develop solutions to environmental problems using the principles of engineering, soil science, biology, and chemistry.

So, she decided that, with her own company set up, she would be able to serve the industry better, especially when it comes to compliance issues.

Commenting on time management, Nurul Huda says job stress is inevitable but adds that the most important thing is how to manage your stress.

"We have 24 hours a day to plan. The keyword is PLANNING what to do and what to delegate," she says.





Ir. ZAINAB BINTI KAYAT
PROCESS ENGINEER

Through Zainab's eyes and achievements, we see the perspectives of an engineer in national oil company PETRONAS, where she has contributed to new breakthroughs with technology and engineering solutions. Within the organisation, she is an industry shaper and mover, with a string of accolades behind her.

She says: "Innovativeness comes when we have to resolve problems within ridiculous deadlines especially during a crisis, or to pave new ways of working because of an organisational change."

All these have made Zainab who she is and what she has achieved over the years.

With her many years of experience, this outstanding engineer shares with us that her mental strength, finding additional information and having different approaches are what have allowed her to conquer doubtful moments and overcoming challenges. She sets the benchmark for not only women, but also for many engineers out there, from development to championing and deployment of solutions as well as being an advisor.

What an inspiration these women engineers are! They are not merely women engineers with a degree but they are the ones who have decided to pursue the safer path to climb the corporate ladder, who have broken traditional frontiers and who have formed their own companies.

So go ahead and be a trendsetter, an entrepreneur engineer or a forefront technology developer. Start a trend that will motivate future generations. ■

