Crafting Leaders of Tomorrow through Young Engineers ASEAN Federation of Engineering Organizations (YEAFEO)

**Note:** Young Engineers ASEAN Federation of Engineering Organizations (YEAFEO) represent the Young Engineers of the national engineering organisations under the umbrella of the ASEAN Federation of Engineering Organizations (AFEO), and comprise members engaged in the common professional pursuit of engineering who are aware of the important role of engineering in the advancement of the social, economic, and industrial development in the ASEAN Region. In December 2010, in Hanoi, Vietnam, YEAFEO had their 17th meeting where leaders of YEAFEO shared their views on crafting the leaders of tomorrow.

**HOW WOULD YOU DESCRIBE THE DEVELOPMENT OF ENGINEERS AS LEADERS IN YOUR COUNTRY?**

A1- Engr. Shuhairy: In terms of leadership development of young engineers, IEM has provided a platform with many opportunities for all young engineers in Malaysia. The IEM Young Engineers Section (YES) has eight IEM branches, namely, YES Kedah/Perlis, YES Penang, YES Perak, YES Southern, YES Sarawak, YES Miri, YES Sabah as well as YES Terengganu, which was formed last year. The branches have provided ample opportunities for young engineers to develop their leadership skills. Committee members of YES are also invited to become part of the working team of the IEM committee. This creates the opportunity for young engineers to learn from senior engineers in terms of organising projects and activities.

A2- Guzman: Engineering professionals in the Philippines have grown tremendously in the past decade, especially in the fields of mechanical and electronics and communications engineering. This clearly provides support for the country’s drive for development - building new structures, expanding major structural investments catering mostly to residential and commercial progress, and the construction of transportation linkages to various areas from central Metropolitan Manila. The engineering curriculum in universities have adapted significantly well with the changing times and developments globally and within the region which enables and promotes a strong engineering pool of talent for the country and abroad. There are also a number of homegrown, strong, technical leaders from various fields who have become widely recognised across the globe.

A3- Toyama: In my field, there are no special developments to distinguish a leader from any other engineers. With that in mind, an active engineer should attend seminars which are organised by the discipline of IPEJ (The Institution of Professional Engineers, Japan) or any other associations. IPEJ provides a platform to develop one’s leadership skills.

A4- Ir. Razali: A leader should have the aspiration to organise activities that are needed by the organisation. In FAM-PII, leading the young engineers’ organisation is quite different. In this case, the young engineers are still in the process of becoming professional engineers. So leadership development in this organisation should include activities that contribute to the development of young engineers to the professional level.
ARE THERE ANY SPECIAL PROGRAMMES FOR YOUNG ENGINEERS IN THE YOUNG ENGINEERS ORGANISATION IN YOUR COUNTRY?

A1- Engr. Shuhairy: In Malaysia, specifically IEM YES, we have organised a series of talks on the Route to Professional Engineers. Besides this, we also try to promote the Route to PE Club, which meets once a month for updates and to have a question and answer session with the professional interview committee. IEM has also introduced a logbook scheme to support young engineers with specific mentors.

A2- Guzman: We have many conferences, conventions, symposia and technical sharings that are held throughout the whole year and organised by 12 Accredited Professional Organizations (APO) in the Philippines, which are member organisations of the Young Engineers of the Philippines (YEP). The most recent event is the IECEP 60th National Convention from 7 to 10 December 2010 at the SMX Convention Center, Pasay City, which was attended by senior engineers, young engineers, students and businessmen of the industry. An upcoming event is being organised by the Young Geodetic Engineers of the Philippines to celebrate their first yGEP-NCR Seminar entitled, “Breaking Grounds”. We are also working on beefing up our membership through these APOs from the results of the Licensure Examinations which is held annually, or sometimes bi-annually, for each field of engineering. Of course, we do not want to take the fun out of being young engineers. We also organise social events such as the Bowling Tournament of the Society of Metallurgical Engineers, and other similar activities.

A3- Toyama: I am now an engineer in training, and studying to be a Professional Engineer (PE). There is an executive committee within IPEJ which monitors the growth and development of an engineer in training and associate PEs. There is also a portfolio within IPEJ that develops and implements a programme for young or associate professional engineers.

A4- Ir. Razali: In Indonesia, especially in FAM-PII, we work as closely as we can with the industry in order to familiarise more young engineers with knowledge of the industry’s technology. We believe that all young engineers should have two elements of knowledge: one in the form of a university education and the other from the industry. These two elements should combine in FAM PII.

DO YOU FORESEE A BRIGHT FUTURE FOR YOUNG ENGINEERS IN YOUR COUNTRY WITHIN THE NEXT 10 YEARS?

A1- Engr. Shuhairy: The challenges that young engineers face today will be different from those in the future. The competition among engineers in the world has created a new era for future young engineers leaders. With the rise of new challenges and focus areas such as green technology and nuclear energy, there is clearly a need for a different style of management in engineering. With the globalisation of engineers in Malaysia, we shall rise to meet these challenges.

A2- Guzman: I am enthusiastic about the technical and leadership preparations that are being carried out for the younger generation of engineers in the Philippines. I am very confident that the technical skills that young engineers acquire are adequate in addressing the current concerns and global issues. The bigger challenge is in having the right leadership to drive these developments forward and towards the path for progress. I am a firm believer of this adage, “Engineering, like poetry, is an attempt to approach perfection. And engineers, like poets, are seldom completely satisfied with their creations”. So, in my mind, engineers will naturally lead the world to embrace progress as they are well-equipped to do so with the right skills and talent. We also have the right attitude embedded in our leaders to make this happen.
A3- Toyama: In Japan, many senior engineers retire when they reach the stipulated age limit. Unfortunately, many young engineers are not yet prepared to take over the reigns. Thus young engineers must come together to address this problem. A solution to this problem will be expected from a leader of engineers. In 10 years time, I believe young engineers will become influenced to take up more responsibilities and challenges from senior engineers.

A4- Ir. Razali: Ten years into the future, I hope FAM-PII can produce more capable leaders that can provide substantial input to knowledge building and contribute to society and community. Having achieved success, it is hoped that these capable leaders will remember that FAM-PII was the place where they developed their leadership.

HOW HAS YOUR APPOINTMENT AS THE CHAIRPERSON AND YOUR COUNTRY’S OFFICIAL REPRESENTATIVE INFLUENCED YOUR PERSONAL DEVELOPMENT?

A1- Engr. Shuhairy: As chairman of IEM YES, I have represented Malaysia in the Young Engineers ASEAN Federation of Engineering Organization (YEAFEO) gathering that was held in Thailand in 2008, Singapore in 2009 and Vietnam in 2010. My involvement in YEAFEO has given me the chance to get to know other countries. By keeping abreast with the engineering development among ASEAN countries, I can become a better engineer.

A2- Guzman: I have been actively involved in YEP since 2006, and my first YEAFEO representation for the Philippines was at the 24th CAFEO held in Malaysia. Since then, I have regularly attended and represented my country at the annual board meeting serving as the Executive Secretary until 2008. I was compelled to become an adHoc/honorary member in 2009 due to my relocation to Malaysia, China and Vietnam, but that did not prevent me from continuing to engage with the ASEAN organisation until today. I have actually built a closer bond with this community of ASEAN engineer members and their activities during the time when I temporarily resided in their respective countries.

This opportunity has provided me with a regional and global perspective, networking opportunities that are beneficial to both my professional and personal development. I am greatly satisfied with the current developments that the organisation is pushing for. For example, the approval of the ASEAN Engineer Register Young Engineer (AERYE) which, although it took a couple of years to realise, is a milestone for all of us in YEAFEO. This, for me, is another key milestone representing the Philippines and ASEAN in moving up the professional ladder, especially since my line of work with Intel has a global reach as well. Hopefully, we can promote more engagement with European-based as well as other global organisations in the future.

A3- Toyama: It is a great opportunity to meet and understand the present condition of engineers from within ASEAN, and to provide feedback about them to engineers in my country.

A4- Ir. Razali: As a young engineer leading this organisation, I have gained a sense of self-confidence and developed a network with other engineers from among ASEAN countries.

WHAT IS YOUR DREAM FOR YOUNG ASEAN ENGINEERING LEADERS?

A1- Engr. Shuhairy: My dream is for all 10 ASEAN countries, including Japan and Hong Kong, to think and act together to meet the future challenges of globalisation in the engineering sector. Of course, the focus should be on engineering for a better living. My dream is that, one day, all young ASEAN engineers can influence the world and to ensure that the voice of engineers is heard everywhere.

A2- Guzman: I only have a single thought in my mind when it comes to the ASEAN engineer; simply put, to be a world class, competitive and respectable professional in any field, any country and any job one is currently engaged in. That is how I would like the Young ASEAN Engineering Leaders to be distinguished anywhere in the world.

A3- Toyama: I hope young ASEAN engineering leaders can clarify the fields in which we can cooperate together, and which fields in which we can compete against, and call for the participation of more international exchange activities. The challenge is certainly there for future engineers.

A4- Ir. Razali: I really hope we can become a united group of young engineers and serve other young engineers who need a guide in their own country. With support from other ASEAN countries, we hope that our suggestions and opinions can be accepted by all ASEAN governments in order to build a better standard of living for the world community.