

Prof. Dr. Ali Yeon Md Shakaff

Academia is the only career that allows you to 'do things tomorrow, whatever that you dream tonight'...

Please elaborate on your educational background.

I had my early education in Kulim and later at the Kolej Sultan Abdul Hamid in Alor Setar, before continuing my A-Levels at Grimsby College of Technology, England. I completed my degree in Electrical & Electronic Engineering at Newcastle University in 1982 and returned to serve as an electronic engineer at RTM for a year. I went back to Newcastle in 1983 to pursue a Ph.D in digital signal processing, via the USM's staff training program and started teaching at USM in early 1988, at the School of Electrical & Electronic Engineering.

As UniMAP's iconic legend, please explain UniMAP's setting, her past and her future.

UniMAP (or KUKUM at that time) was set up as one of the 4, new generation technical universities in the country. It was conceived by the government during the aftermath of the '97 financial crisis, with the aim of providing the industry with a new breed of 'highly skilled' engineers (skill in this sense, is both theoretical & practical), to help rejuvenate the economy. In the northern region, UniMAP was assigned the task of supporting the electronic industries in Penang, Kulim Hi-Tech Park and Sg. Petani, which explains why microelectronics became the initial focus of this university. Given that mandate, a number of engineering programs that was necessary to support such industries was put together. UniMAP was also instructed ('unwritten' though) to offer unique boutique programs that are useful to the industry. This explains the offering of programs such as mechatronics, metallurgy, photonics and several others.

About 3 years after our establishment, there seemed to be a growing shift in the focus of the economy towards bio-based industries, albeit the 'high-tech' bio-industry, and there was also a growing concern about the co-existence of the industry with the environment. Hence, the Bioprocess and Environmental Engineering programs were introduced. More recently, with the availability of the various core-engineering programs and the sudden upsurge in the interest in agriculture, Biosystem Engineering, a modern and high-tech form of agriculture engineering has been introduced.

Entrepreneurship for the engineering students has always been an important agenda for the university, in fact, well before it was made compulsory by the Ministry. It was also realized that with a purely 'engineering' environment within the university, it was somewhat difficult to conduct proper and effective programs in business and entrepreneurship. Hence, came the decision to offer several programs in this area, although it was a 'tough' battle to convince the Ministry on the need for such programs, and many other programs for that matter!

Therefore, essentially the university has been very dynamic and will have to continue to be dynamic to ensure that it remains relevant and competitive. I have no doubt that under the leadership of the present Vice-Chancellor, this university will continue to strengthen its current programs whilst at the same time explore the need for more and more emerging programs.

As second in command, what are your aspirations for the university? Has it been achieved?

My hope has always been to see this university command a 'respectable' status in the eyes of the stakeholders and other universities, at the soonest possible timeframe. In this respect, although there's always much to be done, we're almost there.

The overall curriculum, particularly the engineering programs are 'structurally' in place. In a way they are quite unique and designed to accommodate the original aspirations of the government, although inadvertently we faced some problems with people like the Board of Engineers, when things seem somewhat 'unconventional' to them (e.g the 'practical-intensive' issues, prolonged industrial training, which although are good for the students and their would-be industry employer, the BEM thinks otherwise!).

In terms of physical build-up, the 'signature' facilities are there..... the 'one-of-a-kind' semiconductor facilities, the Engineering Centre, Teaching Factory, the Dragon & Phoenix complex, the R&D Clusters, the Agro-Tech station and numerous others sprawled throughout Perlis; and not to mention the upcoming completion of part of the Pauh Campus soon.

Where do you see the university heading in the next 20 years? Will UniMAP's niche programmes still be niche? Or will have to change over the course of time?

As can be seen over the past decade, the world economy has become increasingly unpredictable. This directly affects the way we educate our masses. Hence, the University has to continually re-invent itself and it will be helpful for everyone involved to keep on open mind and not be constrained by 'pre-conceived' notions of what the university should be doing. For instance, it has been quite a struggle for the University to introduce non-EE programs, especially the bio-based and business programs, simply

because of the so-called original unwritten 'mandate' that we should only be doing electronics. In short, the way I see it, our niche will continue (and should be preserved) to be engineering, particularly micro/nano electronics, but we have to re-examine our position from time to time, depending on the industry trends.

After being at the helm for these past years, do you miss 'being there'?

I have 'mixed-feelings' on this. 'Being there' one is obviously in a better position to somewhat 'influence' the University on how you want things to develop, especially since you've been there from day-1. On the other hand, 7 years has been long enough and perhaps it is time to contribute to the university in a different way.

As for research, how much has UniMAP progressed? Is it up to your mark?

It has progressed beyond my expectation. Considering the fact that only about 25% of our lecturers are PhD holders, a considerable number of the the younger staff, despite lacking experience have done extremely well in getting research grants and producing good results out of their research. Other than the numerous research medals that have been won over the years, the quality of refereed publications are also on the increase.

How much more progress should be there?

What else remains to be achieved?

We are now in a situation whereby a considerable number of staff have gone or are going for their study leaves (not to mention the significant number of expatriates and locals who are on a short term contract basis). Hence, the need for the schools and research clusters to ensure research continuity is very important.

There is also the need to encourage a more cross-disciplinary research within the university and to promote general awareness among the lecturers regarding the availability of numerous research facilities within the university. This will ensure better utilization of resources and further enhance our research output.

Lastly, although much has been achieved, obviously it is still only a drop in the ocean. We'll need to strive harder to ensure even greater successes in the future.

Having worked at different places, how much does UniMAP differ from other places?

It is obviously very, very different. Seven years ago, we started off in a row of buildings beside paddy fields, 30mins from the Thai border, and trying to do some 'high-tech' stuff. Now, we have proven that it can be done, despite the numerous odds that had been stacked against us.

So, I guess UniMAP is different in terms of the 'never say NO spirit'

On a personal note, do you miss making decisions for the university as a whole?

Decision making often comes with responsi-

bilities and I do not mind having less of that for now. On the hand, it has been quite an eye-opener over the past 2 months wandering across the university looking at things from the other perspective!!

How are you spending time these days?

I am now on a 9-month sabbatical. For the past 2 months I have been going through a period of adjustments (and trying to improve my health as well)... for the first time in 14 years that I am now without a secretary!!

I normally start my day with a 3km brisk walk, before going to the office, now at Jejawi (courtesy of the Dean of Mechatronics). I spend most afternoons either at the Muhibbah Lab or the Sensors Technology Lab at Pengkalan Assam, trying to catch up on some research work with the Sensors group.

What about research and lectures?

I've been somewhat fortunate that all these while I have managed to somehow maintain my involvement with the Sensors Group. So, I am taking the present opportunity to enhance my contribution to the ongoing research work. With regard to lectures, yes it has been a while since I last conducted proper classes. So, again I am trying to make a gradual preparation for whatever class that I will be handling next year.

As for UniMAP's young staff, what would you say to them? Why?

Academia is the only career that allows you to 'do things tomorrow, whatever that you dream tonight'. It gives you a lot of flexibilities and basically you can 'control' your destiny (God willing, of course). The 'publish or perish syndrome' still persists and will continue to persist due to the very nature of the job. You must participate in research, better still be part of a research group, enhance your teaching and technical skills, produce papers and try to find consultancy opportunities wherever possible (for some added income!) and lastly, always be prepared to assist your School in whatever way possible. Here at UniMAP, it is always teamwork (as reminded by the VC almost every week!!).

Is there a benefit of having a large population of young staff? Academically and research wise?

Yes, definitely. Being young obviously means more energetic, enthusiasm, inquisitive etc, etc... But they must be prepared to be the 'Gurkha' during the first few years of their career, especially in research. I have very often seen young lecturers 'sub-con' their 'research' work to their students. This will not be good for them, more so if you have yet to do your PhD. Remember, this is, after all, a technical university and we must all be competent technically. It saddens me to see a lecturer in electronics who has never once build a hardware throughout his/her life. To them... it has always been Matlab, Matlab and more Matlab and...!!!