

## MASANORI SUGISAKA "KUKUM Impressed Me"

To utter his name, Masanori Sugisaka (isn't difficult compared to French name) it just blew my mind to a land where technologies is so sophisticated, one just could simply become a couch potato and let the robots does the housework, well that was what told by my colleagues who studied there. Too much of improvisation, I predict.

But, nevertheless I can't be more than disagree with my colleagues when we discussed Japan advance technologies, her people hardworking ethics and robotic. After the World War 11, some 'naughty' hypothesis said Japan is nothing but bundles of scrap metals. We, who once conquered by them, can observe with our own bare naked eyes to witness how fast they developed and become the gigantic economic superpower and their products (be it electric goods and automobiles) fill in every house around the globe.

And, now ever since our government East Look Policies, we have adapted some of their technologies, learned by the Gurus and as a result we could be proud of own lines of Proton cars (at least though). As for Prof. Masanori Sugisaka, who has been appointed as KUKUM external examiner, I must say nothing but proud to have him on board.

Must say thousands gratitude to Assoc. Prof. Dr. Zuraidah, who sent this set of questions to him via emails as I am only adding it for the introduction. Let us read what Prof. Masanori Sugisaka has to say about KUKUM.

What is your general comments on the curriculum structure and content of the academic programs offered in KUKUM, particularly for Mechanical Engineering and Mechatronic Engineering?

It is good

What do you think regarding the 'practical-oriented' teaching-learning approach practiced in KUKUM. Do you think it is effective? How would you improve it?

The approach said is excellent but to determine the effectiveness of the implementation must frequently be supervised, monitored and assisted with the right training and equipment.

What are your comments on KUKUM's physical infrastructure? Impress, keep up the maintenance and right utilization.

Any comments on the academic strength of KUKUM's academic staff, particularly in the School of Mechatronic Engineering.

KUKUM academic staff particularly in the School of Mechatronic has the right combination of knowledge, practice and research experience in engineering field. These combination top up with knowledge in teaching methodology, discipline in education ethics and principles are valuables academic staff that can definitely deliver.

Please share your views on the possibility of merging Mechatronic Engineering with other engineering disciplines.

In Mechatronic itself there are many elements such as electrical, material, mechanical design, robotic and automation, control system and many more. Most of them have been covered in the school curriculum. The immediate need is more on bring out and emphasizing these elements in the current teaching.

Please share your views on the most promising research area in the fields of Mechatronic engineering and Mechanical engineering, particularly in terms of emerging trends for the future.

The trend for research is market driven. The market trend is moving toward environment preservation, safety and alternative consumables. An example for environment preservation is in soldering. Current soldering method uses plumbum which is hazardous to the environments. Research on alternative ways and materials is highly valued. In the robotics field, the R&D is focusing on robot

assisting the handicaps and paralyzed, robot in hazardous condition and terrorism prevention. Other areas would be on alternative consumable and industrial product design.

Form your observation, what are KUKUM's strengths?

'Hands- on' learning and curriculum relevance to the needs of the industry.

Is there any weaknesses?

KUKUM is new and has a lot of area for improvement but it is too early to judge it as weakness.

What are the areas that you think KUKUM should prioritize on in order to provide the best learning experience for its students?

It is vital to remain relevant to the industry need and changes. The best learning experience would be to provide the students chances to have the industrial experience under controlled and supervised condition. This can be through visits, trips, exchange program, short courses and training. Another way is to bring the industrial experience into the classroom by having visitors from the industry and being host to relevant competitions and exhibitions.

Please share your views on how best you think 'internationalization' of KUKUM can be pursued.

- KUKUM students must be able to relate at international level.
   Meaning, the communication, the mind set, cleanliness, neatness, respect, working style, attitude, discipline, punctuality, company loyalty must be instilled in the students continuously.
- International exchange for lectures and students
- Entering international competition, conference and exhibition.
- Being host for international level events.
- Make and maintain connection with oversea universities and colleges
- Academic staff preferably has some industrial background as they are more aware of the industrial

need and working style.

Do you think short courses should be organized to supplement current course on offer as well as for public consumption? What kind of short courses would be best?

Yes definitely, and they should be for public, staff and student consumption. Let the student act as trainers to improve communication and boost up confidence, establish relationship with public community. The public are the end users of industrial product. Good relationship and interpersonal skill would mould the students to be effective agent for the industry especially in data gathering and public education. For example hobby courses making simple robot, modifying engines, designing webpage, desktop publishing for banners, posters and making logos, photo editing for promotion and artistic impression.

Can you share your views on any other matters you think would be helpful for us to pick and improve at?

In Japan, the academic institutions have very good relationship with the companies and industry. Colleges and university make research for the industrial sector. The lectures will delegates the task among the students. In return, the industry sponsors equipment for the research. Usually the research areas are research that takes a long time to be carried out, involves a lot of observation and data gathering. Sometime it is for comparison study, which means result from the industry R&D department is compared to the university findings. Other benefits would be for the students who will later get job offers from the company. Such relationship must be made and maintain. From time to time the lectures should go for industry visits as to check out the progress and changes. This way the academicians could maintain the relationship and remain relevant to the market. The students must always be reminded of their duty to serve and fulfill the industry needs.

