

Engineering syllabi set for revision

In this edition of The Anvil, Irene Wanyanga and Onaya-Odeck talk to Prof. Francis Aduol, Dean, Faculty of Engineering, University of Nairobi, over the proposed change of the engineering curriculum.

Anvil: It has been alleged that your engineering graduates are half-baked. What is your opinion?

Prof. Aduol: That is not true and whoever alleges that has not told us. For the last many years our students have been taught by some of the best staff. In many universities outside Kenya, our graduates excelled in their graduate studies. They may, however, lack some hands-on industry practical experience.

Anvil: Prof. Aduol, it seems there is no practical content and industrial attachment in your programmes. What do you intend to do about this?

Prof. Aduol: The industrial attachment has only been compulsory for mechanical engineering students. But it is now going to be compulsory for all engineering degree students. It will be formalized so that it is properly supervised and examined like any other course units.

Anvil: How about Curricula?

Prof. Aduol: The current curricula and course programmes for both undergraduates and postgraduates are not logical and in some cases, irrelevant or outdated. There is therefore a need to review them to accommodate recent scientific and technological advances in the education and training of engineers



Prof. Francis Aduol

We want to develop effective, relevant and broad-based degree programmes in the Faculty.

Anvil: How are you going to do this?

Prof. Aduol: The Faculty is considering offering two types of degree programmes: Bachelor of Science in Engineering (B.Sc Eng) and a Master of Science in Engineering (M.Sc Eng) which is going to be scientifically oriented; and Bachelor of Engineering (B.Eng) and Master of Engineering (M.Eng) which is going to be industry oriented.

Anvil: Can you explain further the meaning of these programmes?

Prof. Aduol: The Bachelor of Science in Engineering B.Sc (Eng) course would be offered to students who wish to pursue a more-or less scientifically oriented programme, with a more in-depth scientific exposition of engineering principles and concepts with insights into the "science of Engineering". The

course should have an industrial attachment of not less than twelve weeks. The Bachelor of Engineering (B.Eng) on the other hand would seek to prepare graduates principally for careers in industry. It would focus on "applied engineering", whereby students would undergo industrial attachment of at least six months.

Anvil: The issue of examination failures in the Faculty is of public concern. What can you say about it?

Prof. Aduol: It is true the rate of failures in the Faculty is high particularly in the 2nd. As students go to the 5th year however the rate reduces considerably. The failure mainly attributed to poor knowledge of mathematics by the students. In 2nd year they are required to apply their mathematical skills to solve engineering problems but in most

cases they are found wanting in this requirement.

Anvil: What is the Faculty going to do about this?

Prof. Aduol: At the moment we handle this by having mathematics lecturer from the Faculty of Science to teach our students. This however has not been a successful arrangement. The faculty is therefore arranging to establish its own maths department to be closely monitored in-house in handling this matter.

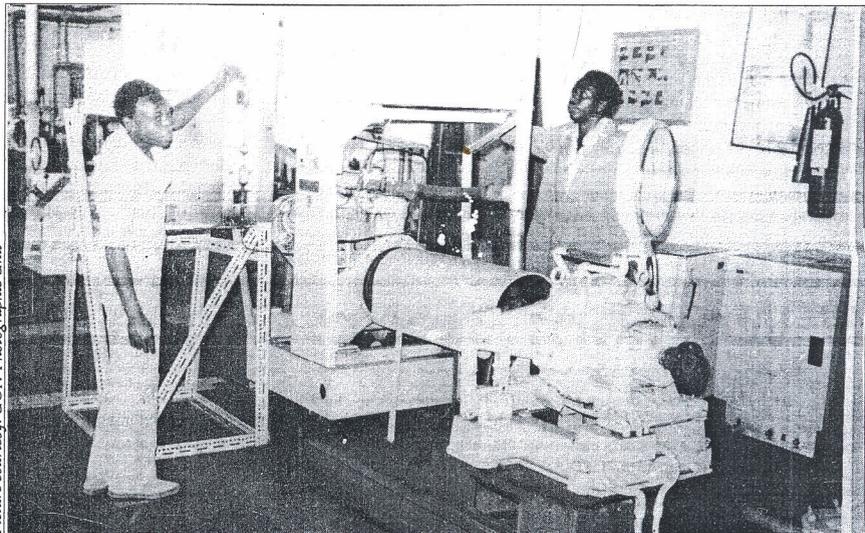
Anvil: What tangible and practical contributions do you expect the Industry to play in these new proposals?

Prof. Aduol: The industry's contribution to the Faculty is of immense potential. We only need to tap it. For example you may wish to know that the curricula seminar we had in May largely succeeded

because of generous material and goodwill support from the industry. We will continue consulting and collaborating on matters of attachments, professional and experienced discussions/seminars, joint research projects, donation of physical machinery and equipment, and many others. The onus is on the faculty to take the initiative and approach the industry so it knows who we are, what we doing and what we can do.

Anvil: How soon do you expect to implement these proposals?

Prof. Aduol: As soon as they are considered and approved by the Senate we shall implement them. We are ready to begin even as early as the beginning of the next academic year in November this year.



Engineering students in a workshop. Complaints of half baked graduates are common.

Herbal extracts: Do they really work?

By LILY ADUKE

"I lost 15.5 kilos and kept it off 11 years using the products consistently. My waist has shrunk six inches and I'm much more physically active," says Al Hyman of California, USA.

"I was a herdsman milking cows before discovering Herbalife. I was underweight and the products helped me gain 9.5. kilos," says Gary Skillman of N. Sussex, England.

Herbalife Products

Jolanta Kursak of Wasmec, Belgium explains that she suffered from Anorexia nervosa, an eating disorder, for 18 months. Although she had weekly vitamin injections, she grew weaker and her desire for food diminished. When she started using herbalife products, she gained her vitality.

This is the international success story of nutritional health products that has tantalised and enticed many

Kenyans. Besides Herbalife International, which originates from Beverly Hills, California, there is Golden Neo-Life Diamite International (GNLD) from South Africa and Seven Seas from China, currently in the Kenyan market.

A few years ago, the Kenyan society was not particularly concerned about appearance and health. This has since changed. However, today's busy life-style, does not allow much time to watch what, where and how often we eat or not eat at all. It also does not give much time for physical exercise. That is why the concept of natural weight control and health management system looks attractive.

The natural health products promise to assist weight gain, weight loss and maintenance; promote a healthy, smooth, clear skin; assist bone and teeth formation; aid night vision; help the body's ability to cope with pollutants, provide essential ingredients for fertility and contribute to the general healthy function of the

body, among other advantages.

These organisations boasts of assortments of nutritionally sound, safe and effective products. The range of products offered are herbal beverages, cellular nutrition protein drinks, tablets that eliminate excessive fats, multi-mineral and multi-vitamin supplements for children, among others. Reactions on the efficacy of these products in the Kenyan scenario are varied.

"My mother-law has been arthritic for long time. We have been spending Kshs. 5,000 per month on her medical expenses. We are willing to invest Kshs. 40,000 on these natural health products because it has worked for somebody else who had a similar problem. It will solve her problem once for all," says a Kenyan lady.

Bouts of Diarrhoea

"My twins suffer from never ending common colds. A friend advised that we try some of these

natural health products. I have been giving them the shakes regularly but I have not seen any difference. Besides, my husband has been on some of those tablets made from natural extracts. The side effects are disturbing. Instead of regular bowel movement, he experiences constipation for a number of days followed by severe bouts of diarrhoea," complains Mary Onyango, a Nairobi housewife.

"I considered myself overweight. I wanted the slim-line. These natural products were God-sent after experimenting with other slimming methods. I am disappointed because I'm losing weight at an alarming rate. I have been forced to stop," laments a user who requested anonymity.

The following extract is from the Daily Nation of June 14th, 1997. "An Unapproved Chinese Herbal drug is being administered to unsuspecting burns patients at the Kenyatta National Hospital.

Three of the patients on the drugs,

Known as MoBo, are said to have died. However, it could not be confirmed whether the death is due to the drug."

According to the same report, Dr. Mwanzia, Director of Medical Services and Professor Meme, Director of Health Services at the Kenyatta National Hospital, anybody wishing to clinically test a drug has to submit a proper protocol proposal to the ethics committee.

Foreign herbal extracts

The Information officer at Kenya Medical Research Institute, (KEMRI) Mr. Bernard Muthuka said that these foreign herbal extracts are treated as any local herbal medicine by the organization.

Dr. Koskei, the registrar at the Ministry of Health and Professor Meme have not been available for comment.