SPEECH DELIVERED BY PRORESSOR KWASI KWAFO ADARKWA, VICE-CHANCELLOR OF KNUST AT THE SPECIAL CONGREGATION FOR AWARD OF I10NORARY DEGREES AND POSTGRADUATE DEGREES HELD ON FRIDAY, 27TH NOVEMBER, 2009 AT THE GREAT I1ALL AT 10.00 AM

SALUTATION

Otumfuo Osei Tutu II, Asantehene and Chancellor Chairman and Members of Council Members of the Council of State Ministers of State Members of Parliament Members of the Diplomatic Corps Our Guest Speaker for the 6th R.P. Baffour Lecture Series Nananom

Pro Vice-Chancellor and Pro Vice-Chancellors from Sister Universities

Registrar and Registrars of Sister Universities

Provosts

Deans and Directors
Heads of Department
Members of Convocation
Senior and Junior Staff
Junior Members of the University
Graduands and Honorary Graduands
Distinguished Invited Guests
Ladies and Gentlemen

WELCOME

On behalf of the Chancellor, Council, faculty, students, senior and junior staff as well as all stakeholders of the University, I would like to welcome you to this special graduation ceremony which is the first ever to be organised at this time of the year in the history of the University. The timing of this Congregation may appear rather unusual but there is always a first time to every event or phenomenon. We have had to organise this event because of several reasons some of which I would outline presently.

In keeping with tradition, we have had to organise this Congregation because, as most of you are no doubt aware, such special events are always organised after the RP. Baffour Memorial Lectures so we can recognise people who have distinguished themselves through their substantial contributions to society both here in Ghana and other parts of the world. The lectures were very interesting and reminded all of us about our sordid past and how that is playing out in contemporary geopolitics. As we all saw, the lecturer was excellent for the occasion. As an authority on Caribbean and Diasporan history, he has really left an indelible imprint on our minds. This year, we will be awarding three honorary doctorate degrees and three others will also be receiving meritorious certificates because of their contribution to the growth and development of the University.

We have always had two graduation dates on our books for postgraduate students in this University and yet, we have never really practiced same. This has tended to disadvantage some of our international students who may not be able to wait for the main Congregation in June. With the introduction of the November graduation, they now have an additional flexibility and choice in terms of when to graduate. Indeed, this is what happens in most world class universities; especially in North America and I hope that it becomes a permanent feature on our University calendar.

UNIVERSITY POLICY AND ITS IMPACT

In addition to the foregoing, because of the University's well placed emphasis on postgraduate studies, we are now beginning to see a gradual increase in the number of postgraduate students and, more specifically, those completing their studies within the stipulated period. In 2006, there were only 386 students but this year, the number has increased to 887 students; representing an increase of 230% or a little over 76% each year. In spite of this, we still need to grow the number of graduate students to about 30% of the University's total enrolment in five years' time. Currently, postgraduate students comprise 14.7% of the total student population. In terms of proportion of postgraduate students graduating in each year, there has also been a substantial improvement. Five years ago, for example, we were graduating only a handful of postgraduate students in the order of less than 100 students. Things have changed drastically and this year, for example, we graduated 485 students in June and will be graduating a further 410 students this November or specifically today. To add this number to those graduating in June 2010 would have compounded our difficulties further; and hence, the need to organise this Special November Congregation. As most of you would have noticed, the June Congregation is almost always very well patronised and this has tended to crowd out some parents and students; hence, the need to organise this graduation ceremony or congregation.

OBJECTIVE OF REPORT

In view of the fact that this Congregation is devoted to graduation of postgraduate students, my objective in this report to Congregation is simply to present an overview on the planning, organisation and conduct of postgraduate studies in this University. In addition, I will also outline some of our flagship postgraduate programmes and their potential impacts on national development efforts.

POSTGRADUATE STUDIES AT KNUST

Ladies and gentlemen, postgraduate studies at KNUST have witnessed tremendous improvements in their planning, organisation and execution. A few years ago, it was a common feature to 'see someone pursuing a master's or doctoral programme for periods well beyond their recommended or stipulated completion limes. This time around, this is unlikely to happen except that the student or supervisor does not apply himself or herself to the rules governing postgraduate studies in the University. Other checks and balances, including continuous monitoring of students, have been introduced and this has been possible because of the unrelenting efforts of supervisors, Heads of Department, Deans of Faculty and the Dean of the School of Graduate Studies whose efforts are duly acknowledged and very much appreciated.

Ladies and gentlemen, I must hasten to add that gone are the days when students' project works were left on shelves only to gather dust. The good news is that the Association of Commonwealth Universities (ACU) has selected KNUST as the Institution for hosting the first Repository Centre. Consequently, when the Centre which is tile very first in Ghana takes off in full operation, brilliant student project works and results of other research activities would be made available online to be accessible by all across the globe. Apart from works emanating from KNUST, other relevant information from other scholars would also be made accessible on the KNUST Website. In this day and age when information management has become so inevitable, the giant stride by the University is not only timely, but well placed and must be duly acknowledged.

As we are no doubt aware, the level of activity in our Graduate School, in various respects, virtually dictates the visibility of the University. Without the research pursued by graduate

students through the guidance of faculty members, we are doomed as a University. Contrary to popular opinion, research is the major reason for the establishment of all universities because this directly informs teaching as well as service or community engagement which ultimately opens other windows for further research. It is in this regard that we believe that we should place the right emphasis on research through the work of postgraduate students. Consequently, the University's policy is now to place priority on postgraduate studies. I am happy to announce that virtually all Departments in the University now have on offer, postgraduate programmes with seven of these Departments mounting multiple programmes.

This morning, we are presenting nearly 410 postgraduate students for graduation. Our local doctoral programmes are now yielding some modest results. This morning, three of such students will be graduating with their terminal degrees. Thus far, only ten of the initial 125 doctoral candidates who commenced their studies in 2006 have graduated, most of who have been absorbed into the University as faculty members. Two of those graduating with doctorate degrees today are from the Department of Biochemistry and Biotechnology with the other one coming from the Department of Geography and Rural Development. This raises several concerns and the implications which have been well discussed at various levels in this University. Clear policy guidelines have now been evolved and this will guide us in dealing with this problem.

RESEARCH OUTCOMES

The doctoral research projects have produced significant findings with implications for poverty reduction and food security in Ghana and the West African sub region. In one of such projects, the major chemical and physical properties of Water Yam (Dioscorea alata) also known locally as Afasca or Afascw, that affect food and industrial processing qualities have been identified. The study revealed that D. Alata varieties had higher total dietary fibre than what is reported for brown rice (5%) with a few varieties having comparable values to whole wheat flour. The specific varieties with high total dietary fibre will be useful in diet formulation because of health benefits.

In addition, the study revealed that D. Alata (elubo) is very good for amala product (a popular Yoruba meal or 'Kokonte'). This product should therefore be promoted in Ghana on account of its high flour storability and ease of preparation. It is also interesting to note that because of the significant mineral variations in D. Alata varieties, they have the potential for improvement through breeding programmes. The other projects also present very useful findings but time will not allow me to present all of them to Congregation.

At the master's level, some useful work is also on-going in every Department of the University, particularly in the Departments of Crop and Soil Sciences, Agroforestry, Building Technology, Architecture, Planning, Civil Engineering, Geomatic Engineering, Materials Engineering and Mechanical Engineering. All the Departments in the College of Science have interesting master's level projects as well as the Department of Clinical and Social Pharmacy and the Department of Microbiology. In all these departments, what is clear is that in spite of the generic requirements inherent in any Master of Philosophy programme as a pure research degree, such students are now required to take or audit some required courses to further enhance their analytical abilities. It is also our expectation that the refurbished laboratories in Physics, Chemistry, Theoretical and Applied Biology as well as Optometry and Visual Science should further enhance the conduct of research by postgraduate students and faculty members.

Some of our flagship master's programmes include Water and Sanitation as well as Road and Transport in the Department of Civil Engineering. As a result of these activities, the Department is seriously being considered for the establishment of a Centre of Excellence for water and sanitation in the Sub-Region.

The Master's programme in Water and Environmental Sanitation is aimed at building capacity for sustainable development in water supply and environmental sanitation in Ghana and the Sub-Region. Research conducted in this programme has led to the development of a filter for the removal of manganese and iron from ground water. This technology which was developed in conjunction with Community Water and Sanitation Agency (CWSA) has been replicated and installed in more than 200 rural communities and it has won several awards including the President's Excellence Awards for Public Service 2006, the All Africa Public Sector Innovation Awards 2007 and the AAAPAM Award for Innovative Management 2008.

The Road and Transportation Engineering programme started in 2004 to train engineering personnel at the postgraduate level within the road agencies so that they can build the necessary capacity to effectively plan, design, construct, manage and operate the national road asset. Out of this programme, has come the Transportation Research Seminars which are now conducted annually to present the findings of course participants to Road Agencies and the general public as well as to receive vital feedback and suggest new research areas. The seminars have been thoroughly successful and have thus far covered Road Management Systems, Traffic Congestion and Safety, Construction Technology and Evaluation of Pavement Materials.

The MSc programme in Plant Breeding and Seed Sciences, hosted by the Department of Crops and Soil Sciences as well as the Department of Horticulture is being funded by Alliance for a Green Revolution in Africa (AGRA) with participants from Ghana, Liberia, Sierra Leone and Niger. Their research projects centre on crops including rice, sorghum, cowpea, groundnut, cassava and maize. For the programme to run smoothly, the College of Agriculture and Natural Resources has signed MOUs with the Crops Research Institute, Kumasi and the Savannah Agricultural Research Institute, Tamale to enable the students conduct their research in these institutions and also for joint supervision of student research projects with Scientists in the two institutions.

In October this year, our students from the Department of Crop and Soil Sciences participated in a Scientific Workshop organised for all Alliance for Green Revolution (AGRA) grantees in Africa held in Bamako, Mali from 4 - 9 October, 2009. Following the excellent performance of our students in the presentation of their on-going research (oral and posters) at the Workshop, the Department has been given the nod to submit another proposal for a second cohort for the 2010/2011 academic year. More importantly, the Department has been selected as a Centre of Excellence to run a PhD programme in Soil Health for the Sub-Region. This programme will start with 20 students from Ghana, Nigeria, Burkina Faso, Niger and Mali from January, 2010. It will be a 4-year programme estimated to cost US\$3million and will receive a grant from the Rockefeller and Bill and Melinda Gate Foundations.

Our MBA programmes need special mention. From the modest beginning of only one MI3A programme in the then Department of Economics and Industrial Management, we now have several versions of this programme on offer. They include the following: Regular MBA, Part-Time MBA, Executive MBA and the Commonwealth of Learning's Executive MBA. Needless to say, these programmes are oversubscribed and in some cases, prospective

students prefer waiting for an additional year to get onto the programme rather than going to enrol in other MBA programmes elsewhere. The quality of the programme has improved substantially over the years and it is now a requirement for all students on the programme to write a thesis or project work. Partly as a result of this and several presentations they make in the programme, it is understood that most employers are increasingly showing a preference for KNUST MBA graduates. Indeed, our MBA programmes on offer here at the KNUST are certainly the best in the country and, therefore, we intend to encourage all our science and technology graduates, in particular, those who need to enhance their managerial and other related skills to enrol on one of our MBA programmes depending on their work schedules and location in the country.

DISTANCE LEARNING

With the above in mind, we have taken opportunity of the situation to develop our Distance Learning programme. Consequently, apart from Bolgatanga and Cape Coast, the Commonwealth of Learning's Executive MBA programme is on offer in all the eight remaining regional capitals. Most workers have found this arrangement very beneficial because it offers them an opportunity to improve themselves without leaving their stations and families for extended periods. Industrial Mathematics and Environmental Science are two other programmes on offer by distance. It is our hope that we will gradually develop other programmes strictly on a demand driven basis.

ACCOMMODATION FOR SCHOOL OF GRADUATE STUDIES

Currently, our School of Graduate Studies is crammed together in some three rooms in the annexe of the Chemistry building. The School's accommodation is, therefore, congested but our initial efforts to further develop it vertically were not endorsed by our structural engineers. Subsequently, the Graduate Students' Association of Ghana has mooted the idea of building a Graduate Centre on campus and, therefore, the idea of incorporating offices of the School of Graduate Studies within the complex is being seriously considered. The sketch designs will have to be completed soon so we can have a much clearer idea of the level of investment required and how it can be realised, It is therefore anticipated that this complex will soon become one of our priority projects. In addition, we need to build up the capacity of the School of Graduate Studies to administer the various programmes.

ADVICE FOR GRADUANDS

At this point in time, I would like to turn my attention to our Graduands. For some of you, your master's degree would be the end of your studies within the formal context but as you return to your work places, please remember to participate in any continuing education programme that comes your way. Clearly, your graduate studies here at the KNUST should enhance your efficiency so you can be rewarded accordingly. In the same vein, some of you would want to continue to obtain your terminal degrees. I would like to use this opportunity to inform you that there are opportunities here at the KNUST for such people. Where there is need for your services in any Department of the University after you have obtained your terminal degree, we will be more than happy to have you join the faculty soon after your graduation. Where ever you find yourself, remember to be of service to your community and nation. Remember to register with the alumni association where ever you find yourself and participate in its activities

CONCLUSION

Distinguished invited guests, ladies and gentlemen, in conclusion, you would have seen very clearly that it is our determined resolve to emphasise postgraduate training here at the

KNUST so that we can spearhead the economic, industrial and social development of Ghana. There are clearly several advantages for pursuing your graduate studies at KNUST and so we invite everyone who is contemplating to study for a higher degree to seriously consider this University.

I wish all our Graduands the best of luck and God's guidance in your future endeavours. May the good Lord make you the head and not the tail, and you will always have the upper hand; if you listen to his commandments. The Lord bless you and keep you; the Lord make his face to shine upon you and be gracious to you and give you peace.

Thank you for your attention and God bless us all.

Professor Kwasi Kwafo Adarkwa Vice-Chancellor, KNUST