



Faculty of Science,
Chancellor College

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FACULTY OF SCIENCE BIMONTHLY BULLETIN

VOLUME 7

ISSUE 1

February 2018

EDITORIAL

Welcome our esteemed readership to the first Issue of Volume 7 of the Faculty of Science bimonthly bulletin. The year 2018 has begun on a good note for the Faculty when in the first two months it organized and hosted 3 international workshops (more are to follow in the coming months); and when one of its senior members got the prestigious TWAS Research Grant, and another appointed into the Kenjin-Tatsujin Advisory Council. Find out who and what, in this Issue. Faculty members also participated in tree planting, travelled, published and attended thesis defense by post-graduate students. The Faculty's infrastructure also got a boost when the new Chemistry laboratories constructed

under ADB/HEST project were handed over to College by the contractor, ready for official launch and use. Find these and other stories in this Issue for your reading pleasure. Enjoy!



Inside the new Chemistry labs at Chancellor College, thanks to College leadership and Malawi Government. Handed over: 9 February 2018

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Dr. Chomora Mikeka Appointed a Member of the Kenjin-Tatsujin International Advisory Council for the AAI

Description of the Kenjin-Tatsujin International Advisory Council For the "Ashinaga Africa Initiative (AAI)": Supporting the Higher Education of Orphaned Students from Sub-Saharan Africa

Ashinaga, a nonprofit organization named after the 1912 American novel Daddy-Long-Legs, focuses on providing educational funding and emotional support to children who have experienced the loss of one or both parents or guardians from illness, accidents, suicides, and disasters, including the 2011 Great East Japan Earthquake and Tsunami.

Dr. Chomora Mikeka, Deputy Dean of Science as a "Kenjin" has been appointed to be a Member of The Kenjin-Tatsujin International Advisory Council which is a body of international leaders that forms a key part of the Ashinaga Africa Initiative. Kenjin (賢人) are intellectuals and business leaders held in high public regard who have knowledge about global issues (e.g. Nobel laureates, academics, entrepreneurs).

For the inauguration, Dr. Mikeka visited Kyoto, Japan from 27th February - 8th March

2018. As Kenjin, he will act as an intellectual resource for "Ashinaga Africa Initiative." He will provide valuable advice and proposals as to the formulation and management of the project, and offer ongoing counsel about the project's development to Ashinaga. He will assist the headquarters to develop the institutional trust and authority necessary for fundraising and establishing relationships with universities.

He understands he will not be expected to fundraise on an individual level, but rather act as a support system for the project. He will also advise Ashinaga in finding suitable matches between scholarship students and universities. He is expected to facilitate the exchange of information with universities and assist with other support-related tasks. When possible, he will visit and interact with Ashinaga scholarship students during their period of study.



Pic: Dr. Chomora Mikeka with Mr. Tamai, President of Ashinaga at a ceremony held in Westin Miyako Kyoto Hotel to hand over the letter of appointment.

Faculty of Science's Flask Wall Mushroom Team Participates in Tree Planting Day



Pic.: Dr Placid Mpeketula, Principal Investigator for the Flask Wall Mushroom Project.

Chancellor College's Faculty of Science through the Flask Mushroom Project led by Dr. Placid Mpeketula participated in a tree planting exercise that took place on 11th January 2018 at Chigumula Forest in Blantyre where 6,000 indigenous trees were planted. The exercise was organised by Weather Chasers, a WhatsApp Group whose Chairperson is Prof Sosten Chiotha.

Gracing the occasion was the Vice President of Malawi Dr. Saulos Claus Chilima who encouraged Malawians to combat effects of climate change and deforestation through planting and taking care of

existing trees. The Vice President observed that natural disasters being experienced were a result of massive deforestation. He underscored the need for Malawians to practice afforestation and re-afforestation in order to conserve natural resources. Chilima appealed to Malawians to safeguard against any wanton cutting down of trees for the betterment of future generations.

Chairperson of Malawi Weather Chasers and Regional Director of the Leadership for Environment and Development (Lead) Southern and Eastern Africa, Professor Sosten Chiotha explained that if the present generation does not plant trees, it would be doing injustice to future generations. Chiotha hinted that trees are one of the valuable resources needed by every country, hence the group's decision to plant more trees.

In pictures >>



Pics (R & L): Flask Mushroom House team planting trees



Pic: Dr. Placid Mpeketula (Flask Mushroom House Innovator) making a contribution to Weather Chasers, Malawi



Pic: Flask Mushroom Team with Weather Chasers



Pic: Partners in Environmental Sustainability (LEAD SEA and Flask Mushroom House Team, Chancellor College)

District Agricultural Development Officer (DADO's) Visit to Mushroom Project

On 8th January 2018, the DADO for Chiradzulu District, Mr. Isaac Ali visited the FlaskMush project. The aim of the visit was to encourage the project on the activities it is doing in the district and to also appreciate the plans that have been set for 2018. The officer also provided technical advice for the implementation of 2018 plans. He emphasized that the project should target households and not put much emphasis on women to ensure harmony in the families and that the project should identify ready markets for mushrooms for the farmers and attach them to these markets. Moreover, contacts should be made with the university communities, chain stores etc, where the project could sell the mushrooms for the farmers while introducing them to

the markets, so that later the farmers should be able to reach out to the markets on their own. The DADO emphasized that he and his team are willing and ready to work with the project to ensure that there is improvement in the lives of the farmers in his district through the project.

The project has planned to construct 250 mushroom shades in 2018 in Chiradzulu district alone. Construction of these started in January 2018 with farmers who are ready with the necessary materials. In his closing remarks, the Principal Investigator, thanked the DADO and his team for their time and contributions to the project.



Pic: Group photo after the meeting, DADO in blue Shirt standing next to Principal Investigator, Dr P. Mpeketula .

EBAFOSA Malawi Chapter Holds a Workshop at Chancellor College

On 18th January 2018 the Faculty of Science hosted an Ecosystem Based Adaptation For Food Security Assembly (EBAFOSA) workshop under the theme Scaling up Climate Smart Agriculture (CSA): Lessons from ESPA Synthesis. The objectives of CSA are food



Delegates pose for a group photo, 4th from right is the guest of honour Mr. J. Mussa seating next to the Principal, Prof R. Tambulasi in White smart casual.

security, improving adaptation and building farmer resilience to climate change and improving mitigation.

In his welcome remarks, the Principal of Chancellor College, Prof R. Tambulasi highlighted a number of projects on food security that the College is implementing, indicating its commitment to food security and why it is a natural home to host EBAFOSA Secretariat. On his part, the Pro Vice Chancellor, Prof. Al. Mtenje emphasized that the EBAFOSA conference will add value to the development of Malawi, the SADC region and beyond. He then thanked ESPA for supporting the organization of the workshop.

Officially opening the workshop, the Director of Land Resources and Conservation Department in the Ministry of Agriculture, Mr. John Mussa, emphasized on the need for innovations to ensure more food to meet the demand for more food for Malawi's growing population. He then pledged his Ministry's support towards EBAFOSA activities. He then invited EBAFOSA to join the Malawi Climate Smart Agriculture Alliance.



Prof. S. Chiotha, EBAFOSA MW VP



Mr. J. Mussa, Director of Land Res.

In his closing remarks, the Dean of Science, Dr. L. Eneya thanked the guest of honour and all the delegates for their time and fruitful contributions during the workshop. He also thanked ESPA for the financial support towards the workshop.

Dr. Timothy Biswick Awarded TWAS Research Grant

Dr. Timothy Biswick, an Associate Professor of Chemistry in the Department of Chemistry, has been awarded the prestigious TWAS Research Grant. The selection of TWAS Research Grants is highly competitive, based purely on scientific merit.

Dr. Biswick will use the grant to support his research project entitled *Sustainable waste management: production of activated carbon from agricultural and agro-forestry waste*. Announcing award of the grant, the TWAS Executive Director in his letter dated 15th January 2018, indicated that Dr. Biswick was selected out of a very large number of applications, an indication of a highly competitive process. He then thanked the Swedish International Development Cooperation Agency (Sida), without whose continuous support the grant would not have been feasible. The grant will run for a research period of two years.

Please Faculty of Science congratulates Associate Professor Biswick for the well deserved achievement. Keep it up!



Pic: TWAS Grant Awardee, Dr. Timothy Biswick

GEMMAP Conference In Pictures (See full story in Volume 4 Issue 1 of Chanco Bulletin)



Pic: Mr. Moses, Head of GES Department, directing the conference proceedings.



Pic: Participants to the GEMMAP conference in the Little Theatre at Chancellor College



Pic: Dr. Blackwell Manda presenting aspects of his work on the evolution of the crust in southern Malawi.

GEMMAP Conference Facts and Figures

Organizer: Department of Geography and Earth Sciences in Collaboration with Geological Survey Department, 18-19 January 2018

Aim: to disseminate preliminary results from the on-going Geological Mapping and Mineral Resources Assessment Project (GEMMAP).

Participation: About 100 delegates drawn from Ministry of Natural Resources, Energy and Mining; international geological surveys; exploration and mining companies; The Malawi Polytechnic; Malawi University of Science and Technology (MUST), and Chanco

Papers: Over 20 papers on preliminary results of the project as well as on the general and structural geology of Malawi.

Opportunities grabbed: The Department took advantage of the conference to sell its postgraduate programmes, including the soon to be implemented PhD programme. Furthermore, the department negotiated a smooth approach to allow geoscience students to be attached to various geoscience institutions and private exploration and mining companies for them to gain hands-on and real world experience.



Pic: Dr. Zuze Dulanya asking questions while students keenly pay attention.

*The Dean of Science
officially opening the
conference on behalf
of the Principal*



Dyson Moses attends a Training in Japan

Courtesy of the cordial relationship between Malawi government and Japanese International Cooperation Agency (JICA) Mr Dyson Moses Head of the Department of Geography and Earth Sciences, took part in the Knowledge Co-creation Programme from 29th January to 23rd February 2018 in Tokyo and Kosaka in Japan funded by JICA. The training was organized under the theme “**Geological information Management for Mineral Exploration in Africa.**” Mr Moses made a presentation on *Mineral development in Malawi*. The training was beneficial for personal and university development in research and consultancy since new skills and knowledge were learned.

Right: Mr Moses Making a speech on behalf of participants from 12 represented Countries.



Chancellor College and LEAD SEA host ESPA Professional Development Course

Ecosystems Services for Poverty Alleviation (ESPA) is a 43.9 million Pounds global interdisciplinary research programme that has funded more than 100 projects over eight years, examining how ecosystems function and how the services that they provide support efforts to alleviate poverty and / or enhance well-being for poor people in developing countries. Jointly funded by the UK Department for International Development (DFID), the Natural Research Council (NERC), and the Economic and Social Research Council (ESRC), ESPA projects included the full involvement of talented developing country researchers working across disciplinary boundaries.

ESPA is scheduled to draw to a close in March 2018 with programme activities now focusing on the dissemination of ESPA insights to key stakeholder groups, and the establishment of a legacy for the ESPA investment at the global, regional, national and local levels. It is in this light that ESPA organized a 3 day Professional Development Course at Chancellor College from 27th February—1st March 2018, with an overarching aim to enhance the capacity of lecturers to teach senior undergraduate and postgraduate courses on Ecosystem Services for Poverty Alleviation in African Universities.

The PDC drew participants from Chancellor College, Polytechnic, Mzuzu University, Malawi College of Forestry and Wildlife, and Museums of Malawi, with trainers drawn from UK, Kenya and Malawi. It is hoped that after the PDC, lecturers are going to incorporate the ESPA insights into their lessons and curriculum, and train others on the same.



Above: The Vice Principal, Prof. S. Sajidu (sited in the middle), pose for a group photograph with participants after he officially closed the PDC

Below: Prof. Chiotha stressing a point during the PDC



Recent Publications (Journal Articles, Book Chapters, Conference Papers)

Publications

Martin Charles Likongwe, Mangani Katundu, Placid Mpeketula, William Kasapila, Microbial Quality Assessment of Open Sun and Solar Dried *Barbus paludinosus* in Lake Chilwa Basin, International Journal of Marine Science, 2018, Vol. 8, No. 10

Twabi. H & Mukaka. M. (2018). Modelling Length of Hospital Stay for Tuberculosis Treated in-Patients at Queen Elizabeth Central Hospital: a Competing Risk Perspective. Open Access Biostatistics and Bioinformatics Vol. 1, No. 2

Book Chapter

Ephraim Vunain* and A K Mishra (2018). Chapter: 'Nanosensors as Tools for Water Resources' in book titled 'Nanotechnology for Sustainable Water Resources', Edited by Ajay Kumar Mishra and Prof. Chaudhery Mustansar Hussain, Scrivener Publishing LLC, USA, 2018, ISBN: 978-1-119-32359-4.



The Faculty of Science Management is calling for more innovative ideas for identifying and resourcing funds that could be used to incentivize top notch research which would precipitate into concrete peer reviewed journal articles. As before, Faculty members are encouraged this year to publish. The Faculty shall soon announce mechanisms for incentives for publications in line with UNIMA Research and Publications Policy. We wish you well and a healthy publishing life in 2018.

Viva Voce

PG Studies in Science

MSc Biostatistics Thesis Defense

Kamunkhwala Gausi, Methodological characterization of QT/QTC in children with severe malaria anaemia receiving Artemether-Lumefantrine preceded by Quinine

MSc in Water Resources Modelling and Governance Thesis Defense

Tisungane Kapalamula, Hydroclimatological analysis of a sensitive lake for early warning lake level forecasting: Case of Lake Chiuta in Southern Malawi

Esther Gondwe, Assessing the current capacity of water institutions in rural Rumphi to deal with floods and droughts

Faculty of Science Announcements

⇒ Departures to and Arrivals from Further Studies:

- ◇ Happy Kileka Nkhonya, Human Ecology Department, left on 6th January 2018 for MSc studies at the University of Australia.
- ◇ Martin Likongwe, Human Ecology Department, successfully defended MSc in Food Science and Technology LUANAR on 12th February 2018.
- ◇ Mayeso Chinseu Lazaro, Human Ecology Department, successfully defended his PhD thesis at University of Hull.

Congratulations!!

- ⇒ IoTWorkshop in Malawi (March 2018), sponsored by ACEIoT (University of Rwanda) and hosted by the Faculty of Science, University of Malawi, has been shifted from March to 19 - 20 April 2018
- ⇒ Regional Centres of Expertise (RCE) Conference hosted by Chancellor College: 8-10 August 2018. For details, contact the LOC Chairperson, Dr. M. Chikuni (mchikuni@cc.ac.mw)