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Unit for Research and Development launched first Workshop for 2014

On 28 February 2014 the Unit for Research and Development launched its first Research and Development workshop for 2014. The focus of the workshop was on “The research process.” According to our records 170 staff and students registered for the workshop. The workshop reflected on a number of important milestones during the research process.

The presentations were collected and were available as a research workbook during the seminar. This workbook will soon be posted onto the CUT website. An information brochure and manual were provided to attendees and covered valuable and helpful information. Clearly defined steps within the research administrative process, contact details, calendar dates for research activities, etc. were packaged within these tools. The Unit for Research and Development provides the enablers to supervisors and students to support them in their research activities and studies.

This workshop, together with the other workshops planned for 2014, will contribute towards the postgraduate experience.

Compiled by Prof Laetus OK Lategan

Dr Khajamohiddin Syed publishes articles in high impact journal

Dr Khajamohiddin Syed, Post Doctoral Fellow from the Faculty of Health and Environmental Sciences has published a research article in a highly reputed scientific journal: “*PLoS ONE*”. This journal is a multi-disciplinary journal hosted by the Public Library of Science and has an impact factor of 3.7. Apart from this article Dr Syed has also published an article in the Springer journal: “*Genes & Genomics*”. The research involves bioinformatics analysis of P450 enzymes evolution and identification of biotechnologically valuable thermostable P450 enzymes. Prof. Samson Mashele from the Faculty of Health and Environmental Sciences and Prof Karabo Shale who is now at the Tswane University of Technology, are part of the study. Part of the research work is carried-out in international research laboratories.

Prof. Jack Tuszyński and Dr Nataraj Sekhar Pagadala from the University of Alberta, Canada, Dr Nada Krasevec from National Institute of Chemistry, Slovenia, Europe and Dr K.H.M. Nazmul Hussain Nazir from Yeungnam University, South Korea are also involved in the study. Dr Syed joined the Department of Life Sciences at the Central University of Technology on 1st July, 2013. Publishing research article in such a high impact factor journal in such a short time shows Dr Syed’s dedication and passion towards scientific research. Dr Syed and Prof. Mashele are looking to develop a bioinformatics centre in CUT to conduct cutting edge research in biotechnology and drug-discovery.



Compiled by Dr Khajamohiddin Syed

Regional Information Forum meeting held at CUT

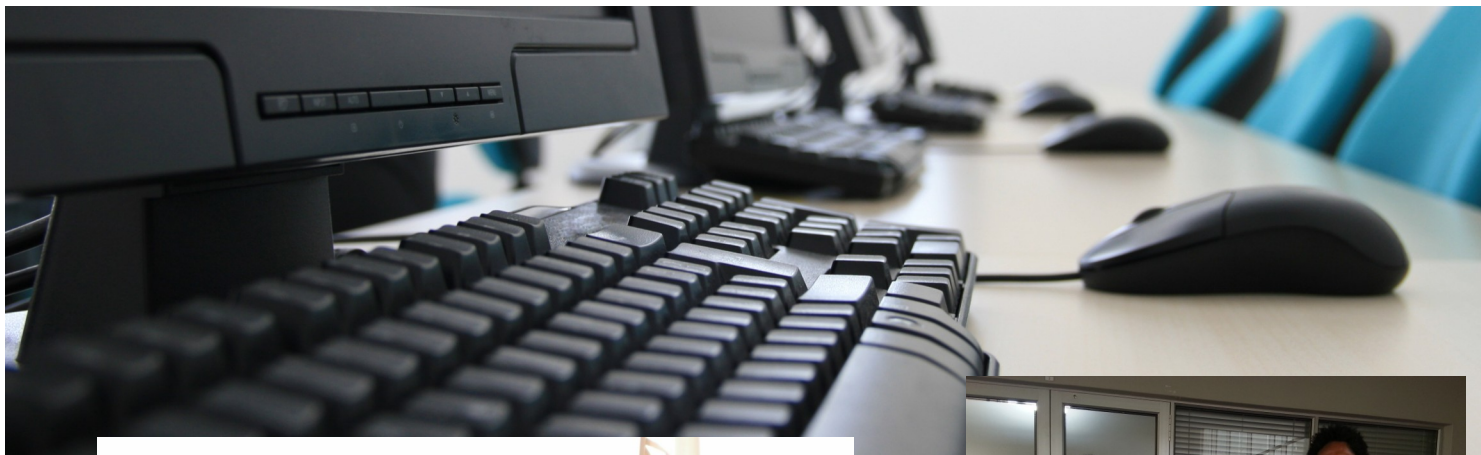
CUT hosted a very successful Regional Information Forum meeting on 11 February. Approximately 40 people (CUT, UFS, FET colleges, government, DST, etc) attended. Prof. Christo Viljoen (independent consultant) and Mr Gerhard Verhoef (project leader) made an outstanding presentation on important recommendations to finalise a Free State Science and Innovation Park! CUT’s inputs were acknowledged during the Forum.

Prof. Viljoen remarked that this is the most ambitious and comprehensive project of its kind (to date) in South Africa. It is also our intention to invite the delegation back for the OECD seminar in March.

Prof Herbert Frey from ULM visited CUT

As part of our Research and Innovation initiative to build research capacity, to attract national and international scholars who are leaders in a field, Prof Jorrie Jordaan had as guest Prof Herbert Frey, an expert in machine vision from Ulm University of Applied Science. He visited CUT from 18 to 23 February. Frey has been collaborating with the Research Group in Evolvable Manufacturing Systems (RGEMS) since its inception, approximately ten years ago and visited CUT several times in the past. Likewise CUT staff and exchange students have undertaken several study visits to Frey’s machine vision laboratory in Ulm. The collaboration with Prof. Frey is regarded as very important and informative by RGEMS.

During the visit Frey gave a lecture on case studies in industrial applications of machine vision and assisted with the planning and implementation of a line scan camera system to facilitate continuous quality control monitoring of products transported on a conveyor belt. He also advised CRPM on the planned procurement, installation and implementation of a camera monitoring system in an additive manufacturing machine.



From left: Dr Petri Jonck from the Faculty of Management Sciences; Dr Idah Manduna and Dr Ntsoaki Malebo both from the Faculty of Health and Environmental Sciences and Prof Shirley Malcom - a former member of the National Science Board in the USA, trustee of Caltech and a regent of Morgan State University. (Dr Willem Groenewald - Faculty of Health and Environmental Sciences was not present at the time of this photograph.)

CUT Post Doctoral Fellows attended Annual NRF Post Doctoral Forum in Stellenbosch

The NRF's National Post Doctoral Research Forum was held from 04 December to 06 December 2013 at the Spier Conference Centre in Stellenbosch. The theme for 2013 was 'Great discoveries emerge from great minds' with the celebration of the Coelacanth which was discovered 75 years ago in the South African coastal shores.

A key session was held on day 2 of the conference which included promoting of women in science. Among the speakers were Prof. Shirley Malcom (seen above) and Dr Romilla Maharaj — Executive Director: NRF. The topic of gender mainstreaming was explained and discussions were held around the utilisation of gender mainstreaming as a policy in South Africa. Prof Malcom explained the challenges women in science face in a first world country such as the USA and what measures have been taken to assist women to break through gender barriers.

The forum had an insurmountable amount of productive sessions in which Post Doctoral Fellows could network and share ideas around various career and research matters.



From left: Ms Lanoi Maloiy (PhD student at the University of South Australia) ; Dr Anne Goujon (Senior Researcher Vienna Institute of Demography and IIASA representative); Dr P Jonck (Post Doctoral Fellow at CUT) and Mr Emnet Tadesse Woldegiorgis (PhD student at Bayreuth International graduate school of African Studies, Department of Political Science, Germany).

Southern African Young Scientist Summer Program (SA-YSSP) held Ceremony at UFS

On 24 November 2013 the opening ceremony of the Southern African Young Scientist Summer Program (SA-YSSP) was held at the University of the Free State. Honourable guests included Prof Jansen (Rector of the University of the Free State), Dr Pillay, the Deputy Director of the National Research Foundation and Prof. Andreas Roodt (Dean of the SA-YSSP) to mention but a few.

Dr Jonck, postdoctoral fellow in the Faculty of Management Sciences, took part in the proceedings reflecting on her experience as a supervisor of the inaugural SA-YSSP that was hosted at the University of the Free State in 2012/2013. The Southern African Young Scientist Summer Program is a mentorship program for doctoral students from African countries and is annually hosted at the UFS.

Compiled by Dr Petri Jonck

RESEARCH AND INNOVATION

Newsletter

DST/NRF Branding for Equipment Grant at CUT

During 2012, Prof Truscott and the team at CPRM have been awarded with a Research Infrastructure Support Programme (RISP) Grant of R 1 331 000.00. The NRF has acknowledged the team's commitment towards sustainable management of the research equipment which was funded with this grant.

The equipment, an Object Connex 350 3D printer, has now been branded with a plaque which was developed by the NRF. This plaque was designed in acknowledgement of the National Research Foundation and Department of Science and Technology.

Upcoming Events

May:

16 - Research Ethics and Integrity Workshop

Word from the Dean

The year 2014 is special to the Research and Development Unit in many ways. It is the implementation of the Research and Development Plan, 2014-2020. The period 2014-2017 is also the second phase of Vision 2020. This year we also celebrate ten years as a university of technology. At the same time we are also celebrating twenty years of democracy.

These events are important for our research agenda. The first item that comes to mind is: What kind of research are we doing? Being a university of technology the research activities can never be isolated from the innovation value chain. This relates to aspects such as application, transfer and innovation. The second question that needs to be unpacked is the impact of the research. Will our research make any difference? What new knowledge will be generated? What new applications will follow on the research? A third challenge is the link between our research agenda and the national and global research agenda. Too often research projects are not echoing the broader research discussion. A fourth matter points to grow the research and innovation participation. This should be evident through publications, patents, graduations, third stream research income, etc. During 2014 the Research and Development Unit will roll-out its Research and Development Plan, 2014-2020. Through this plan all the above and more challenges will be addressed. This serves then also as an invitation to participate in the various activities and platforms created through this plan.

Prof Laetus OK Lategan