

## Research and Postgraduate Support (RPS)

### MESSAGE FROM THE DIRECTOR



This is the first issue of *Ucwaning @ DUT* which is aimed at sharing research news, events and successes. We hope you enjoy reading it and send your news items to be featured and shared with the rest of the University community. I wish you all a restful break and God bless.

### ANNUAL RESEARCH FORUM (March 2012)

Research and Postgraduate Support Directorate held a Research Forum aimed at encouraging staff who are involved in research to contribute to the university's research strategic goals of meeting the targets set by the DHET.

Both the Vice Chancellor and Principal, Professor AC Bawa and the Deputy Vice Chancellor (TIP), Professor FAO Otieno, addressed the forum on the need to create and increase the research base at the university.



A research working group was formed to look at what the university should do in order to create an enabling environment for Research and increase productivity levels for researchers and supervisors. Recommendations from this working group will be forwarded to both the DVC(TIP) and VC for consideration.

### ISSUE1· 2012

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### WEB OF SCIENCE PRODUCT TRAINING

The training was held on the 8<sup>th</sup> of March 2012 at ML Sultan and Steve Biko Libraries. This training was facilitated by Ms Melissa Badenhorst from Worldwide Information Services: Agent Thomson Reuters.



**Web of Science** is an online academic citation index provided by Thomson Reuters: It is designed for providing access to multiple databases, cross-disciplinary research, and in-depth exploration of specialized subfields within an academic or scientific discipline. As a citation index, any cited paper will lead to any other literature (book, academic journal, proceedings, etc.) which currently, or in the past, cites this work. In addition, literature which shows the greatest impact in a field covered by Web of Science, or more than one discipline, can be selectively obtained. For example, a paper's influence can be determined by linking to all the papers that have cited it. In this way, current trends, patterns, and emerging fields of research can be assessed. Web of Science has indexing coverage from the year 1900 to the present. The DUT Web of Science database now dates back to 1994. See [http://apps.webofknowledge.com/UA\\_GeneralSearch\\_input.do?product=UA&search\\_mode=GeneralSearch&SID=P1b9GE1nC4NKND@Mh3B&preferencesSaved=](http://apps.webofknowledge.com/UA_GeneralSearch_input.do?product=UA&search_mode=GeneralSearch&SID=P1b9GE1nC4NKND@Mh3B&preferencesSaved=)

**WORKSHOP ON POSTGRADUATE SUPERVISION**

This workshop was held at EMakhosini Boutique Hotel from 21st – 23<sup>rd</sup> May 2012, facilitated by Prof. Johann Mouton who is the Director of CREST (Stellenbosch University). CREST stands for the Centre for Research on Evaluation, Science and Technology. He is also the Director of the Africa Doctoral Academy at the University of Stellenbosch. The workshop was well attended by DUT supervisors. The following topics were covered at the workshop.

- The changing face of university research: The Gibbons thesis
- Doctoral studies in SA today: Facts and figures
- The difference between the PhD and Masters degrees
- The supervisor: Roles and responsibilities
- Supervisory styles
- The student: Roles and responsibilities
- The supervisory process: Key tasks
- The doctoral research proposal
- Reviewing the literature
- Criteria of a good literature study
- A smart technique for searching the literature **(Computer Laboratory Session).**

The workshop helped participants develop systems, skills and tools to supervise effectively.

**DST-NRF INTERNSHIP PROGRAMME 2012**

The DST-NRF Internship programme provides an opportunity for skills training opportunities to unemployed graduates ( see [www.nrf.ac.za](http://www.nrf.ac.za)). The RPS Directorate welcomes two DST-NRF interns who will assist with RIMS and NRF administration work for 2012assistant interns for 2012.



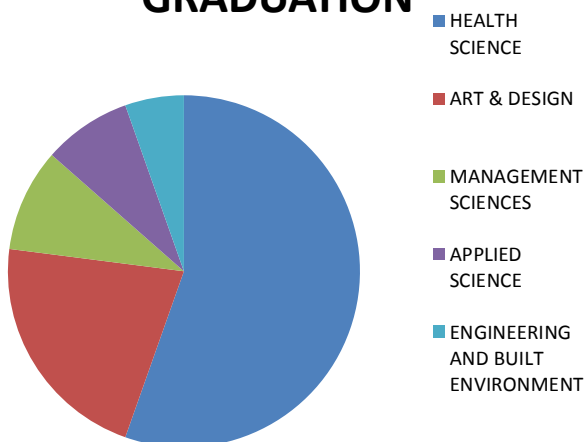
Mr Reuben Manele holds a Bachelor of Social Science degree. Reuben is currently employed by the National Research Foundation (NRF) through the Department of Science and Technology (DST) programme, Reuben currently works in the Faculty of Management Sciences. His duties include administration of the M.Tech and D.Tech: Business Administration. He also assists in filling of appropriate evaluation forms and documentation before it serves at FRC, sending of relevant e-mails to postgraduate students, setting up meetings between the students and their supervisors for commencement of their research, filing of permanent files with the information about the students, keeping and updating postgraduate student files and supporting postgraduate students through the registration process. His liaison role involves liaising with the students on matters affecting their studies or queries. register.

**Mr Nkululeko Qwabe,**



A highly motivated NRF - Research Information Management Systems (RIMS) Intern. He holds a Bachelor of Science (Computer Science and Information Systems). Nkululeko says that DUT has proven to be a good environment for him to grow and sharpen his skills. I have been given an opportunity to network and learn new technologies and working environments. I aspire to be researcher and working in the TIP office will help steer my career in the right direction. The staff are friendly and everyone has been willing to help. I have a great mentor in Nicole Muller. She is exposing me to all sorts of office environments and roles. I learn a lot everyday I'm at work. The office infrastructure is good as well. I really enjoy the challenges that come with this position, as they are helping me grow and stretch my wings. I trust I will make a valuable contribution in the TIP office and the University at large during the time that I'm contracted here and willing to learn all that's available for me here.

**APRIL 2012 GRADUATION**



## POSTGRADUATE INDUCTION



The Research and Postgraduate Directorate held the postgraduate induction on the 8<sup>th</sup> June 2012 from 10:00-13:00 in the Conference Room D-Block, 7 Floor, ML Sultan Campus. It was the first time for 2012 that the forum was meeting to address the post graduate students. The induction meeting was well attended. The purpose of the meeting was to also introduce students to various support departments, library resources and facilities available at DUT. It also included information sharing on external funding opportunities, research capacity building initiatives for students.



The following individuals addressed the forum:

1. The guest speaker for the Induction was Mr Aluwani Nemukula from the Department of Biotechnology and the Institute for Water and Wastewater Technology.
2. Ms Indira Khiramen from Student Housing who dealt with concerns around accommodation issues raised.
3. Ms Shirlene Neerpath from the Library (Postgraduate support staff: Ms Avenal Finlayson and Ms Sara Mitha). A special vote of thanks went to the library from the outgoing Postgraduate Forum committee to the library for their service provision and support.
4. Ms Rowena Pankhurst represented all the faculty officers.
5. Professor Dee Pratt addressed the forum on the Research Capacity Development initiatives that the Research and Postgraduate Support Directorate offers.
6. Ms Charmaine Naidoo from the Research & Postgraduate Support addressed the forum on grant processes for scholarships, NRF online application processes, BTech and MTech block grants, grant and funding opportunities etc.
7. Mr Blessing Mncube, the Chairperson of the outgoing postgraduate forum, addresses the postgraduate students on broader issues which challenged postgraduate students in taking their studies seriously and thinking outside the box as future leaders and entrepreneurs.

The forum identified some challenging issues around adequate and suitable accommodation for postgraduate students, time taken to complete proposals for students registered, the additional time added through the ethics requirements and the inadequate number of supervisors.

## MEET THE NEW TEAM WHO WILL SERVE ON THE PG FORUM 2012



Front row from left: Mr Freedom Vezi - Secretary, Mr Tsepang Mohale - Deputy Chairperson, Ms Thandiwe - Chairperson: Back row from left: Mr Sbonelo Mbambo - Residence Student Rep - Mr Thabani Khumalo - Faculty of Art & Design rep, Mr Nduduzo Ngxongo - Liason Office, Mr Evans Dodge - Project Officer.

## SCHOLARSHIP UPDATE

Thuthuka Programme – call for Research Proposals for funding in 2012, internal closing date has been extended to 9th July 2012.

1. Applications should be submitted electronically on the NRF Online Submission System at <https://nrfs submission.nrf.ac.za/nrfmkii/> For more information please view the attached documents or visit the NRF website at [www.nrf.ac.za](http://www.nrf.ac.za).
2. NRF: B Tech/ Honours Block Grant Bursaries. Please note that we have **40 new** bursaries available in the Scarce Skills category for students in Science and Engineering, Tourism, Technology, etc.
  - Scarce Skills Areas

Accounting, Actuarial Sciences, Agricultural Sciences, Auditing, Biotechnology, Chemistry, Computer Sciences, Demography, Engineering (all fields), Financial Management, Geology, Information Communication Technology, Mathematical Sciences, Physics, Transportation studies, Tourism and Statistics.

**Closing date: 27th July 2012.**

This block grant is exclusively for South African Citizens. Applicants must be registered full time for the year of study. It would be appreciated if B Tech students for 2012 can be informed. All applications must reach the Research Office by Friday, 27th July 2012 at 4pm. If you require any clarity or need any assistance please contact Charmaine Naidoo, Tel: 031 373 2423 or [Charmaine@dut.ac.za](mailto:Charmaine@dut.ac.za)

## DUT STUDENTS TAKE RESEARCH AS A CHALLENGE



Postgraduate students residing at Corlo Court and Student Village residences held a Postgraduate Research Workshop. This workshop covered the entire process of writing a research proposal, from designing a topic, writing literature review and the proposal to paper presentations and publications. The workshop was aimed at helping those senior students who get stuck during the process of writing their research and those who intend to register for doctoral degrees. Professors K Duffy, S Moyo and Mr A Nemukula were invited to make presentations to the students.

### INSTITUTIONAL RESEARCH DAY

The Institutional Research Day Committee (IRDC) invites submission of abstracts for oral and poster presentations from staff, independent researchers, postgraduate students and postdoctoral fellows. B Tech students are encouraged to send abstracts for poster presentations ONLY. Abstracts will be reviewed by the IRDC which reserves the right to accept and allocate abstracts for either poster or oral presentations. Authors of accepted abstracts must attend Research Day.

#### Prizes will be awarded as follows:-

- Best poster per faculty
- Best oral presentation per faculty

#### Oral Presentations

- Oral presentations must be in English.
- Duration: 10 minutes plus 5 minutes for questions / discussion

#### Poster Presentations

Posters will be displayed in a prominent position throughout the day. Full details for the preparation and display of posters will be included in the Abstract Acceptance Letter.

#### Guidelines for Abstract Submission – follow example of abstract attached in pdf format

- Abstracts must be clear and grammatically correct and typed in single spacing, Times New Roman, font 12.
- Abstracts must be submitted in English.
- Indicate name and affiliation of author/s (surname and initials only). Underline name of main author/presenter only.
- Where appropriate, the abstract may be structured as follows:
  - Introduction or objectives: State clearly the purpose of the study
  - Methods: Clearly state how your study was conducted, sample selection, tools and instruments used
  - Results: Present your results in a logical sequence
  - Discussion/Conclusions: Emphasize new and important aspects of your study and conclusions drawn from them.
- Abstract must be between **200 – 250 words** with **6 – 8 keywords**. Please email your abstract to [vanesh@dut.ac.za](mailto:vanesh@dut.ac.za).

Please note: The method of submission is strictly by email. No faxed or delivered hard copies will be accepted. **Abstract submission deadline is Monday, 20 July 2012.** Institutional Research Day will be held on the **20<sup>th</sup> SEPTEMBER 2012**

### WISA CONFERENCE 2012

Civil Engineering, IWWT and Chemical Engineering students attended the WISA conference which took place in Cape Town from the 6-10<sup>th</sup> May 2012.



### PAPERS PRESENTED AT THE CONFERENCE

1. Paper title: Utility problems conference aggravated by unaccounted for water: case study SWA. by Ntombi Mhlongo Department of Civil Engineering PMB.
2. Paper title: Disinfection performance of nanosilver impregnated membranes: by Achisa Mecha Cleophas, **student** department of Chemical Engineering.
3. Paper title: Application of Airlift Reactors in Waste Water Treatment. By Ms Radhika Soobramoney, student, department of Chemical Engineering
4. Paper title: 1. Impact of regional climate change on the rainfall and inflow of the vanderkloof dam in South Africa 2. Artificial rural networks for Precipitation-runoff process modeling. 3. Development and assessment fo a Fourier approximation moded for the prediction of annual rainfall in Ilorin, Nigeria. By Olofintoye Oluwatosin Onaopemipo student. Department of Civil Engineering.
5. Paper title: Rule-Based Agents for 7-Days-Ahead Forecasting of Chemical Dosages. By Dr Bloodles Dzwaairo, Post Doctoral Fellow department of Institute for Water and Wastewater Technology.
6. Paper title: Comparison of FISH and quantitative PCR to study the distribution of *Nitrobacteria* spp. In two full-scale wastewater treatment plants. By Nishani Ramdhani department of Biotechnology

### FORTHCOMING EVENTS:

1. Writing for publication workshop facilitated by Dr Kathy Nokes.  
Date: 11<sup>th</sup> July 2012,  
Time: 09:00 – 11:00  
Venue: Research Boardroom, Gate 1 Tromso Annexe
2. Research Article-writing for Publication” workshop facilitated by Dr Graham Bake and Dr Elisabeth Lickindorf  
Date: 4<sup>th</sup> July 2012  
Time: 08:30 – 16:00 Venue: Chancel chamber,

## EMERGING RESEARCHERS PROGRAMME @ DUT

The Emerging Researchers Programme (ERP) at DUT aims to identify young and early career researchers showing potential and who need to be mentored by more well established faculty members or mentors identified outside the university. To this end the university is in the process of formalizing the Emerging Researchers Programme that will focus on identifying researchers in this category and following up with relevant discipline specific capacity development programmes. Included in this will be the necessity to also identify appropriate one-one support with established senior scholars. The university has already begun to see an increase of this group of researchers participating in various initiatives including the increased rate of Thuthuka applicants since 2011. This group is also specifically targeted to participate in publication writing workshops which are faculty based as a driving tool to ensure the younger researchers and postgraduate students contribute to the research outputs and gain experience in writing journal articles while interacting with well established researchers in their respective fields of research. Included here as well is support for grant writing and incentives that include seed funding for research for new faculty members.

### PROFILES FOR THE ERP PROGRAMME



(Dr OA Ijabadeniyi – Senior Lecturer: Department of Biotechnology and Food Technology)

Dr Oluwatosin Ademola Ijabadeniyi has a PhD in Food Science from University of Pretoria. His area of specialization is food safety and preservation. He has published 6 articles in recognized peer reviewed journals. Oluwatosin has also attended and presented a number of papers in both local and international conferences. His current research focus is microbiological safety of spices and vegetables and novel food preservation with high pressure treatment. In 5 years time, Oluwatosin wants to have become one of the leading researchers in food safety and novel food preservation in South Africa. On support from DUT, he believes that the university should better support research visits for emerging researchers. Research visits will encourage collaborations with established researchers outside the country.

**Hobbies:** Reading, writing, blogging, training, mentoring and motivational speaking.

#### Most Recent Journal Publications:

1. Ijabadeniyi A. O, Buys, E. M, Debusho, L. K & Vanderlinde, M (2011). Irrigation water as a potential pre-harvest source of bacterial contamination of vegetables. *Journal of Food Safety* 31, 452- 461.
2. Ijabadeniyi A. O, Buys, E. M, & Minnaar, A (2011). Effect of attachment time followed by chlorine washing on the survival of inoculated *Listeria monocytogenes* on tomatoes and spinach. *Journal of Food Quality* 34, 133- 141.



(Dr B Dzwauro – Postdoctoral Fellow: Institute for Water and Wastewater Treatment)

Dr Bloodless Dzwauro completed her DTech in Civil Engineering specializing in Water Resources Management at Tshwane University of Technology. She has published 7 articles international journals over and above additional conference proceedings and publications in local journals. Her current research focus area is on Raw Water Quality Modelling and associated processes. Dr Dzwauro currently holds an NRF postdoctoral fellowship. Her research plan over the next 5 years includes the following:

1. Supervising a minimum 15 Postgraduate students in the 5<sup>th</sup> year and beyond.
2. Built a vibrant and well-funded research cluster group for the Vaal and Umgeni basins to influence and support policy and sustainable environmental management.
3. Published a minimum 10 articles in DHET accredited journals.
4. Teaching main streaming modules and conducting research methodology courses.
5. Offering services to Industry and Government for Environmental Systems Analysis, Modelling and Auditing.

When asked on how DUT can better support the ERP programme, Dr Dzwauro identified the need to help establish a culture of research at the institution by conducting research block clinics which have guaranteed journal article outputs at the end of each clinic, the need to engage with industry in so far as offering to provide research students and supervisors for research on industry-oriented issues and to promote strong research groups including assisting with applying for adequate funding.

#### Most Recent Journal Publications:

1. B. Dzwauro, F. A. O. Otieno, G. M. Ochieng' and J. J. Bezuidenhout, 2012. Raw Water Quality Weight Factors: Vaal basin, South Africa. *Water Science and Technology*, accepted on 16-04-2012.
2. Bloodless Dzwauro, Fredrick A.O. Otieno, George M. Ochieng' & Maupi E. Letsoalo, 2011. Data Reduction for Water Quality Modelling, Vaal Basin. Matlab / Book 2, SBN 979-953-307-121-2. Intech Open Publishers, University Campus, STeP Ri, Rijeka, Croatia.
3. Bloodless Dzwauro, Fred A. O. Otieno and George M. Ochieng. 2011. Towards a more sustainable surface raw water tariff structure in the Vaal basin: A situational analysis. *International Journal of the Physical Sciences* Vol. 6(29), pp. 6751 - 6758, 16 November

## EMERGING RESEARCHERS Continues



(Dr Ivan Govender – Senior Lecturer: Department of Entrepreneurial Studies & Management)

The South African constitutional dispensation has introduced many challenges for democracy in particular, the decentralisation of power to the provincial and local government spheres. This has created complex institutional environments in which provincial and local government has to deliver services. Research is undertaken in monitoring and evaluation in the three spheres of government and its consequences towards service delivery, governance, leadership and economic development.

Monitoring and evaluation systems enhance good governance and assists in the improvement of performance. It identifies the gaps in capacity development and directs decision makers for the re-allocation of resources. Monitoring and evaluation is complex and its success depends heavily on the political support.

Currently, government has not fully implemented the Government Wide Monitoring and Evaluation System. This has subsequently impeded the alignment and integration of its policies, programmes and projects across the three spheres of government. The research is critical in highlighting the extent of planning, implementing and managing monitoring and evaluation systems in the three spheres of government.



Dr A Adeyemo – Senior Lecturer: Department of Civil Engineering)

Dr Adeyemo obtained his DTech in Water Resources Engineering at Tshwane University of Technology. His current research focus area is in Water Resources Management. His five year research plan includes becoming an NRF rated and established researcher. Dr Adeyemo would like to see the university create an enabling environment including the simplification of registration of postgraduate students, a unified way of registering postgraduate students, increased DUT resources in supporting postgraduate students in the form of scholarships, conference sponsorship, support for specialised technical training for staff and students and allocation of office spaces to full-time postgraduate students apart from the only spaces available in the library.

#### Most Recent Journal Publications:

1. Enitan AM. and **Adeyemo J. A.** (2011). Food processing optimization using evolutionary algorithms. African Journal of Biotechnology. Vol. 10(72), pp. 16127-16127.

2. Olofintoye O and **Adeyemo J. A.** (2011). The role of global warming in the reservoir storage drop at Kainji Dam in Nigeria. International Journal of Physical Sciences. Accepted. Vol. 6(19), pp. 4614–4620.
3. Odinga CA, Otieno FAO and **Adeyemo J. A.** (2011). Investigating the effectiveness of aquatic plants (*Echinocloa L* and *Cyperus L*) in removing nutrients from wastewater: the case of Chemelil constructed wetland- Kenya. International Journal of Physical Sciences. Vol. 6(16), pp. 3958-3968.
4. Enitan AM, Ogunbanwo S. T. and **Adeyemo J. A.** (2011). Influence of growth conditions and nutritional requirements on the production of hydrogen peroxide by lactic acid bacteria. African Journal of Microbiology Research. Vol. 5(15), pp. 2059-2066.
5. Otieno F.A.O. and **Adeyemo J.A.** (2011). Multi-objective cropping pattern in the Vaalharts irrigation scheme. African Journal of Agricultural Research. Vol. 6(6), pp. 1286 – 1294.
6. **Adeyemo J. A.** and Enitan AM. (2011). Optimization of fermentation processes using evolutionary algorithms – A review. Scientific Research and Essays @ Academic Journals. Vol. 6(7), pp. 1464-1472.

**Dr Nokuthula Sibiyi – Senior Lecturer: School of Postgraduate Nursing**



Dr Sibiyi is Head of Nursing Department which comprises the undergraduate programme (UG) that is located at Indumiso Campus and postgraduate programme (PG) which is offered in Durban. She is also the co-ordinator of postgraduate (PG) studies in the Nursing Department and she co-ordinates PG workshops that are offered to all new PG students in the department. For the past two years, she has been vigilant in marketing the PG studies. In 2012, the department registered 30 new M Tech students and three (3) D Tech students. In April 2011, she graduated one M Tech student and in April 2012, she graduated four (4) M Tech students. She is also involved in interdepartmental PG supervision. In 2011, she published a book chapter on cervical cancer. Her area of specialty is primary health care (PHC) and woman's health. Dr Sibiyi is also involved in a collaborative intervention research study to enhance cervical screening uptake in South Africa. In 2007, Dr Sibiyi was funded through Skills Development to attend a seminar on Grounded Theory in the Institute of Grounded Theory in US. She has been facilitating a series of workshops on the use of this approach.

## EMERGING RESEARCHERS Continues

**(Dr Parvesh Singh - Research Fellow: Department of Chemistry)**

Dr Singh is a Research Fellow in the Department of Chemistry who has published over 13 accredited Journal articles since 2011 including a book Chapter in 2012. He was profiled as an NRF Emerging Researcher in 2011 and is hosted by Prof K Bisetty in the Department of Chemistry at DUT. He obtained his PhD from Guru Dev University in Amritsar (India) specializing in synthetic organic chemistry and computational chemistry. He has published 1 international book in 2012 and 24 Journal Articles. His Research Focus Area is on the applications of different computer programs to understand the three dimensional (3D) structures of biologically active peptides responsible for their physiological and medicinal actions, Drug-protein interactions using Capillary Electrophoresis (CE) and docking techniques, Reaction mechanism studies using quantum mechanics and molecular mechanics approaches. Dr Parvesh's 5 year Research Plan involves studying the Cancer and TB problem. Cancer is a problem of global proportions, and despite intensive research the biochemical mechanisms underlying carcinogenesis are not fully understood, limiting the potential to develop efficient anticancer drugs. We are planning to focus specifically on anti-cancer peptides obtained from different sources (plants and animals) to better understand their 3D structures and mechanisms of action so that novel and potent drugs could be designed based on that information. Moreover, in collaborations with our International partners, we are also targeting the design of more potent anti-malarial, anti-bacterial and anti-TB molecules. Other important targets includes writing new research proposals for funding, both local and international collaborations and the recruitment of more doctoral and Masters Students in research. In next 5 yrs, I would like to see myself as a well established researcher with constructive contributions in the fields of research and academics. The availability of adequate funding, research skills and research facilities are very important factors behind the success of any institution. Thus far, we have constructively used the available resources to drive our research successfully at DUT. However the career security has always been one of my major concerns. Also, apart from our current computational work at DUT, it is my strong desire to extend our research in the field of synthetic and medicinal chemistry for drug design/synthesis at DUT. The requirement of expensive instrumentation and new lab facilities, however, are primary obstacles in this direction. Hence, any support regarding these few concerns would be highly useful.

**Most Recent Journal Publications:**

10. Amit Anand, Gaurav Bhargava, Vipan Kumar, **Parvesh Singh**, Krishna Bisetty and Mohinder P. Mahajan, Diastereoselective nitroso Diels-Alder cycloaddition reactions of 3-dienyl-2- azetidiones with nitrosoarenes, *Letters in organic chemistry*, **2012 (In press)**.
11. **Parvesh Singh** and Krishna Bisetty, Cycloaddition reactions of cross-conjugated azatrienes with sulfene, *International Journal of Organic Chemistry*, **2012 (In press)**.
12. M.I. Sabela, **Parvesh Singh**, Njabulo Gumede, Krishna Bisetty and Salva Sagrado. Evaluation of enantioseparation of (±)-catechin using electrokinetic chromatography and molecular docking, *Journal of Scientific Research in Pharmacy*, **2012 (in press)**.

1. MI Sabela, Njabulo Gumede, **Parvesh Singh** and Krishna Bisetty, Evaluation of antioxidants in herbal tea with a laccase biosensor, *International Journal of Electrochemical Science*, **2012**, 7, 4918-4928.
2. **Parvesh Singh** and Krishna Bisetty, A molecular dynamics study of Lunasin, *South African Journal of Chemistry*, **2012**, 65, 115-124.
3. Pardeep Singh, **Parvesh Singh**, Malkeet Kumar, Jiri Gutt, Philip J. Rosenthal, Kewal Kumar Vipan Kumar, Mohinder P. Mahajan and Krishna Bisetty, Synthesis, docking and *in vitro* antimalarial evaluation of triazole based  $\square$ -lactam-7-chloroquinoline bifunctional hybrids, *Bioorganic and Medicinal Chemistry Letters*, **2012**, 22 (1), 57-61.
4. Mickey Branham, **Parvesh Singh**, Krishna Bisetty and Thirumala Govender, Preparation, Spectrochemical, and Computational Analysis of L-Carnosine (2-[(3-aminopropanoyl)amino]-3-(1H-imidazol-5-yl)propanoic acid) and its Ruthenium (II) Coordination Complexes in Aqueous Solution, *Molecules*, **2011**, 16, 10269-1091.
5. **Parvesh Singh**, Parul Sharma, Krishna Bisetty, Francesc J Corcho and Juan J Perez, Comparative structural studies of T-20 analogues using molecular dynamics, *Computational and Theoretical Chemistry*, **2011**, 974, 122-132.
6. Parul Sharma, **Parvesh Singh**, Krishna Bisetty and Juan J Perez, A computational study of Neuromedin B, *Computational and Theoretical chemistry*, **2011**, 971, 1-
7. **Parvesh Singh**, Parul Sharma, Krishna Bisetty and Mohinder. P. Mahajan, Synthesis and docking studies of thiophene scaffolds in COX-2, *Arkivoc*, **2011**, X, 55-70.
8. **Parvesh Singh**, Krishna Bisetty, Penny Govender and Gert Kruger, Computer simulation studies of Trishomocubane heptapeptide of the type Ac-Ala3-Tris-Ala3-NHMe, *South African Journal of Chemistry*, **2011**, 64, 49-56.
9. Parul Sharma, **Parvesh Singh**, Krishna Bisetty, Alex Rodriguez and Juan J Perez, Conformational space search of Neuromedin C using Replica Exchange Molecular Dynamics and Molecular dynamics, *Journal of Peptide Science*, **2011**, 17, 174-183.

To be profiled in the next newsletter please email the following information to Ms Zanele Shandu: [zaneles@dut.ac.za](mailto:zaneles@dut.ac.za)

- (i) Name, title, department, faculty or focus area.
- (ii) Research focus area plus your five year research plan.
- (iii) Resent publications from 2011 – 2012.
- (iv) A comment on how you think DUT can support emerging researchers to excel in their careers and contribute to postgraduate supervision and outputs.

Articles in this issue compiled by Zanele Shandu. If you have any news you want featured on *ucwaning @DUT* please e-mail: [zaneles@dut.ac.za](mailto:zaneles@dut.ac.za) or call: 031 373 2577