

5.6 Significant Developments and Achievements in Research

5.6.1 Research Outputs

Mangosuthu University of Technology was allocated a total of 16.29 publication units for research outputs submitted for 2016. Our submission for 2017 (not confirmed by DHET to date) was 24.44 units.

5.6.2 Research Awards

The Research Awards Evening aims to recognise staff members who perform research of high quality. The annual research awards recognise the efforts of the researchers over a two-year period.

The evening was hosted on 17 November 2017 at uShaka Marine World. The guest speaker was Dr Doreen Masire. The following achievements were recognised:

Chancellor's prize for the most productive researcher:

Dr ZL Kwitshana

Runner up, most productive researcher:

Dr NJ Gumede

DVC: RIE Gold Prize:

Dr ZL Kwitshana

DVC: RIE Silver Prize:

Dr NJ Gumede

Most productive novice researcher:

Mr AT Jaiyeola

5.6.3 Intellectual Property

Two patents were renewed during the reporting period, namely:

- Patent No. 2012/09619, title: Ceiling in a can, Inventor: Mr D Pons
- Patent No. 2015/02913, title: System of Harnessing Wave Energy, Inventor: Mr BS Ngwenya

Two PCT International Patent Applications based on the South African provisional patent application no. 2015/07849 relating to cancer therapeutics were filed:

- PCT/ZA 2016/050041
- PCT/ZA 2016/050042

The inventor is Dr NJ Gumede.

5.6.4 National Research Foundation Funding

MUT researchers took advantage of the funding instruments of the National Research Foundation (NRF) and a total amount of R1,231,419.48 was received. The following grants were received:

Travel Grants

Dr GD Arthur	R 30,000.00
Dr NM Buthelezi	R 25,000.00
Mrs CM Buthelezi	R 30,000.00
Prof MR Cooposamy	R 30,000.00
Dr MA Jordaan	R 20,000.00
Mr TA Mkhize	R 17,000.00
Dr C Onunka	R 20,000.00

Sabbatical Grants

Ms NX Mkhize	R100,000.00
Mrs BYC Mvuyana	R200,000.00

Incentive funding for rated researchers:

Prof K Shale	R 40,000.00
--------------	-------------

Thuthuka Grants

Dr NM Buthelezi	R210,000.00
Mr SA Buthelezi	R100,800.00
Prof TJ Makhafole	R 89,739.48
Dr LQ Qwabe	R318,880.00

5.7 Financial Aid

5.7.1 Application Procedures

All students who wish to apply for financial assistance call at the Financial Aid Office to collect an application form and return it before a prescribed date, or alternatively download it from the institution's website, www.mut.ac.za.

Students who are already receiving financial assistance for their current year or semester of study must re-apply for further assistance. Only properly completed application forms, submitted on the prescribed date and with all the required supporting documentation attached, are considered. The closing dates for accepting application forms for financial assistance are the last working day of April and the last working day of August every year. These dates apply to all categories of students. All applications for financial assistance are processed immediately after the end of registration and the release of supplementary or aegrotat examination results, and students are informed of the outcome of their applications immediately thereafter.

5.7.2 Upfront Payments

First-year students who are accepted to study at Mangosuthu University of Technology but cannot afford to pay a minimum registration fee are assisted to register with NSFAS funding after going through the normal application process.

Continuing students who intend to register are expected to pay a minimum prescribed deposit, but the deposit is waived if proof of sponsorship is provided. Sponsored students have to submit award letters from their sponsors in order to register. Students who applied for NSFAS funding and have qualified are not expected to pay the minimum prescribed deposit as it is covered by the NSFAS upfront payment facility.

5.7.3 Bursaries and Scholarships

In 2017 our stakeholders in industry and commerce made R44,205,312.17 available for bursaries and scholarships. From that amount, 1,089 students in all fields of study received bursaries to cover their costs of study.

Our bursary and scholarship fund component has been increasing over the past few years. The table below shows the increase since 2013:

YEAR	Number of Sponsors	Number of Sponsored Students	Total Sponsorship
2013	61	359	R 10 409 320.00
2014	89	542	R 17 322 863.00
2015	135	743	R 23 631 758.00
2016	133	750	R 24 774 235.00
2017	148	1,089	R 44 205 312.17

5.7.4 Post-Graduate Bursaries and Scholarships

A prestigious scholarship to the value of R3,300,000 was offered by the National Research Foundation (NRF). Fifty-seven B.Tech students from the departments of Chemical Engineering, Accounting, Chemistry, Human Resources Management, and Nature Conservation were the beneficiaries of the NRF bursary in 2017. The NRF bursary fund decreased in 2017 compared to 2016 because of changes in post-graduate qualifications.

5.7.5 Private Funders and SETAs

A few Sector Education and Training Authorities (SETAs) and business organisations are working in partnership with Mangosuthu University of Technology to promote access and success for students in higher education. The Financial Aid Office has been instrumental in sourcing more funds from the SETAs and other business organizations. In 2017 the Financial Aid Office facilitated the signing of two Memoranda of Understanding (MoUs). The following are the MoUs signed and their value:

ORGANISATION	NUMBER OF STUDENTS	AMOUNT
Mining Qualifications Authority (MQA)	22	R 1 143 592.00
Insurance Sector Education and Training Authority (INSETA)	19	R 190 000.00
Services Sector Education and Training Authority (Services SETA)	22	R 831 998.00
Wholesale and Retail Sector Education and Training Authority (W&R SETA)	63	R 2 367 080.00
ABSA	48	R 9 000 000.00
TOTAL	174	R 13 532 670.00