



with **Christopher Ngoben**

# Non Destructive Testing & PHYSICS

## WHY DID YOU CHOOSE THIS CAREER?

Quality defines my everyday living. This is why when I found out about Non Destructive Testing (NDT) offered at Vaal University of Technology, I decided to change from my original career choice.

## WHAT TRAINING DID YOU UNDERGO, AND WHERE?

This is the career where training and certification is very important, as errors can have catastrophic consequences; therefore an NDT operator is expected to refresh skills regularly. I did my National Diploma in NDT at Vaal University of Technology (VUT) and further went for my level certification at School of Applied Non Destructive Examination (SANDE) for two methods of inspection, namely, Liquid penetrant inspection and Magnetic particles inspection. I also did Wall Thickness Inspection at the Southern African Institute of Welding (SAIW). I have also completed my Baccalaureus Technologiae (B Tech) in Quality from the University of Johannesburg.

## WHAT DOES YOUR JOB ENTAIL?

I am currently working as a junior lecturer, conducting NDT methods both theory and practicals. I am also involved in keeping laboratories habitable including ensuring that the health and safety standards are adhered to; particularly for our students. I also make sure that the equipment are in good working order, inclusive of regular stock taking. I am further involved in research work within our department for innovation purposes because NDT is a growing technology.

## CAREER HIGHLIGHTS?

Working within the various industries was always my goal, acquiring some real NDT experience. Achieving my Baccalaureus Technologiae in Quality. I always wanted to share my experience at the NDT workplace with students. Being a part of Vaal University of Technology NDT lecturing staff is an honour and a dream come true.

## WHAT IS THE MOST ENJOYABLE PART OF YOUR JOB?

Compared with my previous position, I am getting a lot more information by doing research. My current duties are less physical, but does require more reading. My personal and academic growth is thus expedited. I also like the challenge of managing my own work. My current duties are also more personal and informative. It projects more to the future than a daily repetitive job. It also motivates me to get more information, by doing more research about NDT and I am planning to register for an NDT Master's degree qualification.

## POTENTIAL GROWTH- WHERE CAN YOUR CURRENT POSITION LEAD?

There is a huge shortage of researchers within South Africa's engineering and technology sectors. My position as a junior lecturer at the Vaal University of Technology can easily prepare me to become one of the most sort after researchers specialised in NDT.

## 3 IMPORTANT QUALITIES THAT YOUR POSITION REQUIRES?

Creativity, dedication and patience.

***" This career is for any person who is interested in Applied Sciences, willing to travel a lot and work long hours. "***

#### **IN 1 SENTENCE, DESCRIBE YOUR JOB?**

Quality through a boundary of technology.

#### **EXPERIENCE VS TRAINING?**

Experience can be accumulated even before or after training. It is mostly better to attend a course with some previous knowledge in the application, but the best candidate for employment must have both training and experience.

#### **ADVICE FOR GRADE 11 AND 12 LEARNERS CONSIDERING THIS CAREER?**

There is no shortcut in quality. No matter how hard it is to achieve the results, it must be done correctly. NDT needs dedicated people who can tolerate the pressure of working long hours, endure industry conditions and with patience, strive until they get the good results. A person who always wants to learn can survive NDT as a career. NDT is a growing technology that always has 'new' / innovative & advanced methods of inspection.

#### **TYPE OF PERSONALITY THAT WOULD ENJOY THIS KIND OF CAREER?**

This career is for any person who is interested in applied sciences, willing to travel a lot and working long hours. I can say it is the best career for an independent person, and always sober minded person. **You are always on standby expecting a call to report for duty.**



*Christopher Ngobeni*  
*Junior lecturer (NDT)*

#### **WHAT QUALIFICATIONS DO I NEED?**

A matric certificate with pass (level 4) in Mathematics, Physical Science and English for a Diploma in NDT. For a B Tech in Quality, you need to have completed the NDT diploma.

#### **DOES THE INDUSTRY (AND YOUR TYPE OF POSITION) THAT YOU ARE IN, FACE GENDER BIAS?**

An NDT career is for any gender but it is still dominated by men as it was statistically proven that there are few women in the engineering and technology sector compared to men. I think recognition must be given to the Vaal University of Technology (VUT) due to their big role they are playing by offering the NDT Diploma. There is a growing number of women in NDT field that come from the VUT and that is adding a percentage in engineering and technology sector as a whole.. □