

# CURRICULUM VITAE - RIAAN COMBRINCK

## PERSONAL INFORMATION

SURNAME : Combrinck  
 FIRST NAMES : Riaan  
 NATIONALITY : RSA Citizen  
 RELATIONSHIP STATUS : Married  
 LANGUAGES : Afrikaans and English (Both Excellent)  
 E-MAIL ADDRESS : [rcom@sun.ac.za](mailto:rcom@sun.ac.za)  
 CURRENT OCCUPATION : Lecturer at Stellenbosch University

## QUALIFICATIONS

2004 : Matriculated at Grey College in Bloemfontein  
 2008 : BEng cum laude (Civil) at Stellenbosch University  
 March 2011 : MScEng cum laude (Civil) at Stellenbosch University

## JOB AND TEACHING EXPERIENCE

2006 - 2007 : Vacation training at Ninham Shand Consulting Engineers  
 2010 - 2012 : Part - time Lecturer at Stellenbosch University  
 (Subject: Building Materials)  
 2013 - : Lecturer at Stellenbosch University  
 (Subject: Building Materials)

## COMMERCIAL RESEARCH PROJECTS

2009 : Project for fibre supplier - Involved in the testing of Poly-Ester Fibres for increased resistance against plastic shrinkage cracking  
 2012 : Project for flooring contractor – Involved in the experimental and on-site investigation of the cracking of concrete pavements and prescribing possible mitigation methods

## PUBLICATIONS

### Dissertations

- *“Plastic shrinkage cracking in conventional and low volume fibre reinforced concrete”*, Thesis presented in partial fulfillment of the requirements for the degree Master of Science in Engineering at the University of Stellenbosch, 2011.

### Journal articles

- R. Combrinck, W.P. Boshoff, 2012, “Investigation of Plastic Shrinkage Cracking in Conventional and Low Volume Fibre Reinforced Concrete”, Journal of the Concrete Society of Southern Africa, Concrete Beton, Number 131, July 2012.

- R. Combrinck, W.P. Boshoff, 2013, “Typical plastic shrinkage cracking behaviour of concrete”, Magazine of Concrete Research, Volume 65 Issue 8, March 2013.
- W.P. Boshoff, R. Combrinck, (To be published in 2013), “Modelling the severity of plastic shrinkage cracking in concrete”, Cement en Concrete Research.

#### Conference articles

- R. Combrinck, W.P. Boshoff, 2010, “Investigation of plastic shrinkage cracking in concrete”, 4th International Conference on Structural Engineering, Mechanics and Computation (SEMC), Cape Town, South Africa.
- R. Combrinck, W.P. Boshoff, 2011, “Investigation of the critical period for plastic shrinkage cracking”, *fib* International Workshop on Performance-Based Specifications for Concrete, Leipzig, Germany.
- J. Maritz, R. Combrinck, W.P. Boshoff, 2011, “Investigation of the behaviour of low-volume fibre reinforced concrete in the fresh state”, FIB International Workshop on Performance-Based Specifications for Concrete, Leipzig, Germany.
- W.P. Boshoff, R. Combrinck, J. Maritz, 2012, “A model for the prediction of plastic shrinkage cracking in concrete”, 3<sup>rd</sup> International Conference on Concrete Repair, Rehabilitation and Retrofitting (ICRRR), Cape Town, South Africa.
- R. Combrinck, W.P. Boshoff, 2012, “Theory for the early age plastic cracking behaviour of concrete”, 9<sup>th</sup> *fib* International PhD Symposium in Civil Engineering, Karlsruhe, Germany.
- R. Combrinck, W.P. Boshoff, 2012, “Influence of restraint on the early age cracking of concrete with and without fibres”, 8<sup>th</sup> RILEM International Symposium (BEFIB), Guimarães, Portugal.

#### AWARDS

2004	:	Dux scholar at Grey College in Bloemfontein
2011	:	Pretoria Portland Cement prize for Deserving Work in the field of Concrete Engineering, awarded by the Department of Civil Engineering of Stellenbosch University

#### CURRENT RESEARCH FOCUS

Current PhD studies regarding the behaviour and modelling of fresh concrete, with special interest in the prevention of early age cracking of concrete to improve the concrete’s durability as well as increase the overall service life of the structure. The prevention of the cracking includes using alternative material additions such as fibres and admixtures. Other focuses include concrete mix optimisation in attempt to reduce the cement content as well as the general behaviour of fibre reinforced concrete. More recent interests involve the use of different binder materials as alternative to cement.