# DR MARIJKE ANTONIA FAGAN-ENDRES

**CURRICULUM VITAE SUMMARY: August 2017** 

#### PERSONAL INFORMATION

Office Address: Department of Chemical Engineering

University of Cape Town

Private Bag X3 RONDEBOSCH 7701 Tel.: 021 650 1806

Email: marijke.fagan-endres@uct.ac.za

## **QUALIFICATIONS**

2009 – 2013: PhD – Chemical Engineering, University of Cambridge, UK

Supervisor: Dr Michael Johns and Dr Andy Sederman

"Fundamental studies of heap leaching hydrology using magnetic resonance

imaging"

2005 – 2008: BSc – Chemical Engineering, University of Cape Town (with honours)

"Development of assay system for carbonic anhydrase in whole cell systems"

2000 – 2004 Matriculation, Westerford High School, Cape Town

### **PROFESSIONAL HISTORY**

2016 - present Senior Lecturer, Department of Chemical Engineering, University of Cape

Town

2014 – 2015: Lecturer, Department of Chemical Engineering, University of Cape Town

07/2013 - 12/2013: Post-Doctoral Researcher, Department of Chemical Engineering, University of

Cape Town

07/2013 - 12/2013: Assistant Lecturer - Reactor Design II, Department of Chemical Engineering,

University of Cape Town

2011 – 2012: Supervisor – Chemical Engineering Part I Separations Course, Department of

Chemical Engineering and Biotechnology, University of Cambridge, UK

2009: Research Assistant, Department of Chemical Engineering, University of Cape

Town

2009: Tutor – Chemical Engineering Mass Transfer Course, Department of Chemical

Engineering, University of Cape Town

11/2007 - 02/2008: Chemical Engineering Intern, Johnson Matthey Technology Centre, Sonning

Common, UK

# **SCHOLARLY AND PROFESSIONAL ACTIVITIES**

- External examiner:
  - CPUT, Reactor Technology IV RTI440C & RTI400S (2016, 2017)
  - o SU, Reaction Engineering II, CE354 (2017)
  - SU, Final Year Project ("Skripsie"), CE478 | MP478 (2016, 2017)
- Reviewer for:
  - Journals: Hydrometallurgy, Transactions of Nonferrous Metals Society China, SAIMM Journal, Water SA
  - Books: Handbook of Chemical Engineering Calculations 5<sup>th</sup> Ed.
  - o Conferences: IMPC 2014
  - Panels: NRF postdoctoral fellowship grants
  - o Other: Cape Town Expo for Young Scientists judge
- Awards:
  - WISA MWD Symposium 2016, Best Session Award (Nov 2016)
  - o WiEBE Excellence Award: Most Promising Young Woman: Research (Sept 2014)
  - Best Poster Prize winner, 10<sup>th</sup> International Bologna Conference on Magnetic Resonance in Porous Media (Sept 2010)

# **RESEARCH INTERESTS**

Marijke's research interests lie in bioprocess engineering, first initiated during her time as a Research Assistant at the Centre for Bioprocess Engineering Research (CeBER) in 2009 when she investigated algal carbon uptake mechanisms. Her work has since focussed on biohydrometallurgical processes, including heap bioleaching and bioflotation, and the development of novel methods for their study, including magnetic resonance imaging (MRI), X-ray µCT and isothermal microcalorimetry (IMC).

#### **RESEARCH SUPERVISION**

	2014–
Postgraduate degrees completed under my supervision:	
MSc	1
PhD	-
Postgraduates currently under my supervision:	
MSc	3
PhD	3

### **PUBLICATION RECORD**

	Pre-2014	2014–2017	In Press
In refereed journals and books:	3	10	-
Technical reports:	-	-	1
Presented at international conferences:	4	1	-
Presented at national conferences:	3	2	-
Patents:	-	-	1