

Rebecca Sindall

E-mail: sindallr@ukzn.ac.za **Mobile:** +27 (0)72 552 0311

OUTLINE

I am a skilled chemical engineer with broad technical capabilities in wastewater treatment and anaerobic digestion. I have extensive experience of managing research projects and budgets and leading people in a changing environment. I collaborate well with other professionals, possess excellent communication skills, both written and verbal, and am comfortable working alongside individuals from a wide range of cultural and educational backgrounds.

EXPERIENCE

Aug 2016- Present **University of KwaZulu-Natal, Durban, South Africa**
Post-doctoral Researcher

- eThekweni Municipality projects: Water recycling strategy, DEWATS policy, co-digestion of domestic and industrial effluent, faecal sludge treatment with black soldier fly larvae
- Manage MSc students, and contractors as required by projects

Sept 2013- Present **Nile Swimmers, Cardiff, UK & Khartoum, Sudan**
Trustee

- Designed and delivered pioneering female focussed drowning prevention programme in Sudan
- Day-to-day running of small charity

Sept 2013- Present **Royal Life Saving Society Commonwealth, Broom, Alcester, Worcs., UK**
Leadership Development Lead

- Organised and led two-day workshop for 36 emerging leaders in lifesaving organisations from LMICs at World Conference on Drowning Prevention 2015 in Malaysia; designed and implemented monitoring and evaluation programme to measure impact of follow-up projects undertaken by attendees.
- Co-ordinated project management workshops for young and developing leaders

Apr 2014- Jan 2016 **Thames Water, Reading, Berkshire, UK**
Senior Research Engineer, Wastewater Process Innovation

- Based on extensive and on-going review of new technologies, identified and tested energy-efficient wastewater process alternatives, low technology processes, and improved resource recovery options.
- Finance: Monthly and annual budgeting for Wastewater Process Innovation programme (budget of £400,000), ordering, liaison with Buying Team and Invoice Resolution
- People management: Line management of MSc and university placement students, management of contractors as required by projects.
- Health and Safety Co-ordinator for Wastewater Innovation (Apr 2015 - Jan 2016): Point of contact for health and safety queries, support implementation of safe working practices.
- Lab and Pilot Hall Manager (Oct 2014 - Apr 2015): Managed day-to-day running of Wastewater Innovation lab and pilot hall, including stock control, and health and safety.

July 2012- Dec 2015 **Royal Life Saving Society, Broom, Alcester, Worcs., UK**
International Ambassador

- Research into capacity for international development partnerships with RLSS Commonwealth African branches and possible structures based on best practice from existing organisations.

EDUCATION

- Sept 2010-
Apr 2014** **University of Birmingham, Birmingham, West Midlands, UK**
PhD: Increasing the efficiency of anaerobic waste digesters by optimising flow patterns to enhance biogas production
- Ran long-term, lab-scale anaerobic digester tests and measured key wastewater parameters
 - Created computer models of mixing vessels; data analysis using MATLAB and Excel
 - Presented research at international conferences; published research in IWA journals
 - Wrote short course on anaerobic digestion for Midlands Energy Graduate School (MEGS)
- Sept 2009-
Sept 2010** **University of Birmingham, Birmingham, West Midlands, UK**
MSc Water Resources Technology and Management, Distinction
- Industrial dissertation with Severn Trent Water: A phosphorus mass balance at Derby STW
 - Key Modules: Surface Water Resources, Underground Water Resources, Water and Environmental Management, Process Modelling for the Water Industry
 - Prize for academic achievement: Frank Morton Chinn Prize
- Oct 2005-
July 2009** **University of Birmingham, Birmingham, West Midlands, UK**
MEng Chemical Engineering (International Study), First Class (Hons)
- Third year spent studying at University of Waterloo, Ontario, Canada
 - Key Modules: Bioscience for Chemical Engineers, Industrial Wastewater Pollution Control
 - Recipient of five scholarships and prizes for academic achievement and contribution to university life
- Sept 2004-
May 2005** **Loughborough College, Loughborough, Leics., UK**
Chartered Management Institute Level 3 Certificate in Management
- Sept 2002-
July 2004** **The Beauchamp College, Oadby, Leics., UK: Five A-levels**
Maths (A), Further Maths (A), Chemistry (A), Physics (A), French (A)
- Sept 2001-
July 2002** **British School of Lomé, Lomé, Togo, West Africa: Four IGCSEs¹, One GCSE**
Additional Maths (A), Biology (A*), Physics (A*), English Literature (C), German (A*)
- Sept 2000-
July 2001** **Ruwais International School, Ruwais, Abu Dhabi, UAE: Five IGCSEs¹**
Chemistry (A), Maths (A*), English Language (A*), French (A), Business Studies (B)

COMPETENCIES

Teamwork:

- Completed a number of group projects at university, working with students from a variety of cultural and educational backgrounds in groups ranging from 3-10 people in size
- Work with diverse team in UK and Sudan to design and run drowning prevention programmes

Leadership and Management:

- Project, people and budgetary management at Thames Water Innovation

Organisation:

- Organised drowning prevention workshops and training events in Europe and Malaysia
- Organised and chaired Civil Engineering Post-Graduate Departmental Conference and University of Birmingham high performance computing conference

Languages and Communication:

- Able to adapt written and spoken communication style to suit audience, whether targeting academics or youth working in their second language
- Advanced French, basic Spanish and basic German

INTERESTS

Travelling: Travelled in Europe, Asia, North and South America and Africa. Lived, studied and worked in Kenya, UAE, Togo, Canada, Belgium and South Africa.

Water Sports: Enjoy open-water swimming, scuba diving, sailing and surfing.

¹ IGCSE: International General Certificate of Secondary Education offered by the University of Cambridge International Examinations for English-speaking international schools abroad