CURRICULUM VITAE
DR PULANE MOLOKWANE

PERSONAL DETAILS

First Names	:	Pulane Elsie
Surname	:	Molokwane
Nationality	:	South African
Race	:	African
Gender	:	Female
Identity no	:	
Address	:	
Telephone Fax	:	
Email	:	

CAREER STATEMENT

A seasoned professional female Nuclear Physicist, Water and Environmental Engineering Specialist Professional with an extensive corporate governance experience within the water, energy, waste, engineering and petroleum space, driven by a strong desire to achieve outstanding personal career growth and development. She has an extensive experience within the SOE and Advisory bodies. Dr Molokwane is also a researcher with over 40 peer reviewed papers and 4 book chapters and monologues to date. One of the 25 South African emerging Women in STEMI 2017. Dr Molokwane was also no 27 of the 100 globally recognized Nuclear Professionals August 2020.

EDUCATION

2005 – 2009	:	Ph.D. in Chemical Technology (EnvEng-Water Utilisation), Environmental Engineering, Department of Chemical Engineering, University of Pretoria, South Africa ***PhD topic:*** "Simulation of in situ bioremediation of chromium (VI) contaminated site using microbial barrier in groundwater aquifers"
2003- 2003	:	M.Sc. in Applied Radiation Science & Technology University of North West, South Africa ***Thesis Title:*** "Development of a code for the calculation of the release of fission gas and iodine from the Pebble Bed Modular Reactor." (*With Distinction*)

2002-2002	:	Post-Graduate Diploma in Applied Radiation Sciences & Technology, University of North West, South Africa
2000-2001	:	B.Sc. in Physics & Chemistry, University of North West,
1992-1995	:	Matriculated 1995, Ramotshere High School, Dinokana Village, Lehurutshe

INHOUSE TRAINING, SHORT COURSES AND WORKSHOPS

- Director Governance
- Being a Director 1,2,3
- Responsibilities and Duties of Directors
- The New Companies Act
- Enterprise Risk Management
- Performance Management
- Corporate Governance and Compliance
- Project Management
- Hazard Identification
- Business Development & Implementation
- Research and Development Stage Gate Model
- Finance and Budgeting for non-Financial Managers
- Understanding of the Public Finance Management Act

PROFESSIONAL REGISTRATION

Registered with the Scientific Professions Council of South Africa as a Professional Natural Scientist (**Pr. Sci. Nat.**)

A member of the Institute of Directors South Africa.

NONE/and EXECUTIVE, GOVERNANCE AND RISK EXPERIENCE

Non-Executive Director	:Armaments Corporation of South Africa(ARMSCOR), Erasmuskloof, Pretoria, Gauteng	
Period	:	January 2025 – Current

Commissioner :National Planning Commission, The Presidency, Pretoria, Gauteng

Period : September 2015 – Current

Water Task Team **Chairperson**: September 2015 – March 2021

Capable and Developmental State Task Team **Chairperson**:

Governance Workstream chairperson : National Planning Commission, The Presidency, Pretoria, Gauteng

Non-Executive Director : Public Investment Corporation (PIC) Director Nominee, Siyanda Resources, Gauteng

Period : October 2021 – Current

Social and Ethics Committee(ESG) **Chairperson**: Siyanda Resources Group
Period : October 2024 – Current

Audit and Risk Committee member: Siyanda Resources
Period 2022 - Current

Council Member (Deputy Chairperson) : National Forestry Council

Period : February 2022 – current

Non-Executive Director : Sublime Technologies Pty Ltd
Kriel, Mpumalanga. Head Officed in Brazil

Period : October 2021 – December 2024

Non-Executive Director : South African National Biodiversity Institute (SANBI)
Pretoria, Gauteng

Period : September 2021 – Current

Human Resource and Remuneration Committee **Chairperson**: SANBI

Audit and Risk Committee **Member**: SANBI

Board Member : Lepelle Northern Water, Polokwane, Limpopo
Period : August 2021 – Current

Operations and Maintenance Committee **Chairperson** : Lepelle Northern Water

Non-Executive Director : Eskom SOC Limited, Sunninghill, Gauteng

Period : July 2017 – September 2022

Audit and Risk Committee **Chairperson**: Eskom

Period : February 2020 – September 2022

Social and Ethics and Transformation Committee Interim Chairperson: ESKOM
Period : January 2020 – February 2020

Board Tender Committee **Chairperson**: Eskom

Period : July 2017 – January 2019

Audit & Risk and Investment and Finance Committees Member : Eskom

Period : July 2017 – February 2018

Non-Executive Director : Nuclear Energy Corporation of South Africa (NECSA), Pelindababa, North West

Social and Ethics and Transformation Committee Member: NECSA

Period : December 2018 – January 2020

Research and Development Committee : NECSA

Period : December 2018 – January 2020

Non-Executive Director : South African Forestry Company SOC Limited (SAFCOL), Pretoria, Gauteng

Remuneration, Ethics and Transformation Committee Member and Chairperson: SAFCOL

Period : August 2015 – August 2017

Finance and Investment Committee **Chairperson**: SAFCOL

Period : August 2017 – 2018

Board Member : Inkomati Usuthu Catchment Management Area (IUCMA), Nelspruit, Mpumalanga

Water Committee member : IUCMA

Period : July 2014 – April 2019

Audit Committee member : IUCMA

Period : July 2017 – April 2019

Board Member : Sedibeng Water Board, Balkfontein, Free State

Operations and Infrastructure Development Committee member: Sedibeng Water

Period : May 2013 – May 2019

Finance, Investment and ICT Committee **Chairperson**: Sedibeng Water

Period : May 2017 – May 2019

Audit and Risk Committee Member : Sedibeng Water

Period : May 2017 – May 2019

ACADEMIC ADVISORY ROLES

Advisory Board Member : Rand Water Chair in Water Utilisation-University of Pretoria

Period : January 2021 – current

EMPLOYMENT HISTORY

Current Employer : LEPELLE NORTHERN WATER BOARD

Period Employed : September 2021– December 2021

Position : Chief Executive Officer (Acting)

Responsibilities

- Responsible for administrative decisions of LNW(Accounting Officer)
- Ensure that board resolutions and the board's mandate are fully executed
- Ensure that the entity's strategic objectives are met
- Implementation of plans,
- Ensure compliance by the entity and meeting all statutory reporting to the relevant bodies timeously
- Establish, build, maintain, and mend partnerships and relationships with a variety of stakeholders
- Ensure the entity has a sustainable financial position and operate efficiently as it delivers on its mandate to deliver bulk water and infrastructure to the citizens of Limpopo
- Build LNW to be the regional water utility of choice and improve on its reputation

'Current Employer'	:	OLOENVIRON Pty Ltd
Period Employed	:	July 2015– Current
Position	:	Founder and Managing Director

Responsibilities

- Manage and oversee both the environmental division and the property section of the business
- Consulting on waste, water and sanitation related projects
- Environmental Consultancy-(Research, water and process/ solid waste related advisory services, public participation)
- Nuclear Energy related advisory services
- Technical due diligence services
- Technology intelligence

Previous Employer	:	POB Environmental Solutions and Property Investments CC
Period Employed	:	February 2008 – December 2017
Position	:	Founder and Managing Director

Responsibilities

- Manage and oversee both the environmental division and the property section of the business
- Consulting on waste, water and sanitation related projects for municipalities
- Environmental Consultancy-(Research, water and process/ solid waste related advisory services, public participation)
- Energy related advisory services
- Technical due diligence services
- Technology intelligence

Previous Employer	:	South African Intellectual Property Fund and Quintessential Investment Holdings
Period Employed	:	February 2013 – October 2013
Position	:	Executive Technical Director

Responsibilities

- Manage and oversee the technical facet of the incubated businesses for global technology commercialization e.g. Resource Ballast Technologies (Pty) Ltd ("RBT");a ballast water treatment technology portfolio company
- Environmental Consultancy-(Research, water and waste advisory services
- Technical due diligence services
- Fund raising for global commercialization of the 3 incubated portfolio companies

Previous Employer : Sasol Technology Pty [Ltd]

Period Employed : November 2010 – January 2013

Position : Senior/ Principal Environmental Specialist

Main Duties:

- Research into Waste Strategies, Solutions and Technologies.
- Design and implementation of Waste Solutions.
- Commercialization of solid waste and other effluent.
- Modeling and Technology Intelligence
- Review and adaptation of in house policies and procedures to align with Environmental Act, Waste Water Act etc.
- Mentoring and coaching bursars.
- Monitor and manage the external environmental technology area to establish trends, opportunities and threats that may impact Sasol.
- Development of defined landscapes for the environmental technology area and provide technology intelligence for use in decision-making and strategy development.
- Development, maintenance and use of economic models within the Sasol Technology.
- Use of model(s) is the evaluation of the economic impact of technology improvements relative to a technology reference.
- Evaluation of the economic viability of a technology and its impact to the entire Sasol business.
- Integrated Water And Waste Management Plan
- Legal compliance

Previous Employer : Pebble Bed Modular Reactor [PBMR] (Pty) Ltd]

Period Employed : February 2003 – October 2010

Positions : Nuclear Fuel Design Physicist till 2005

Senior Nuclear Analyst 2005 to October 2010

Main Duties :

- Modeling and designing/developing codes for accident scenario for the PBM reactor.
- Evaluation and resting of efficacy of the PBMR reactor fuel's inherent safety features
- Fulfillment of regulatory requirement for the PBM reactor.
- Review and adaptation of fuel design techniques and strategies to ensure efficient and effective fuel design for the Pebble Bed Modular Reactor.
- Review and design of Graphite reclamation techniques.
- Nuclear Waste Minimization technology identification.
- Formulation of the licensing requirements for the Next Generation Nuclear Plant (NGNP) for the DOE (USA).

- Provide licensing support to ensure regulatory compliance with licensing requirements
- Providing interpretation of regulatory requirements
- Providing nuclear licensing services
- Independent review of licensing submissions
- Reactor core design analysis using VSOP suite of computer code
- Fuel design analysis using VSOP suite of computer code and other inhouse codes

ACHIEVEMENTS AND RECOGNITION

- One of the 100 globally recognized Nuclear Energy Professionals; https://fairforce.tech/lists/fairforce-100-nuclear-energy-professionals/
- Served on the review panel/ Reference Group appointed by the Minister of Science and Technology to Review the country's National Research and Development Strategy and the Ten Year Innovation Plan.
- One of the 25 South African Emerging Women in STEMI 2017 and featured in a book launched by the then Minister of Department of Science and Technology in 2017(Minister Pandor); http://www.womeninstemi.co.za/stories/pulane-elsie-molokwane/
- Invitation to Chair two Environmental Engineering Sessions at the 19th International Congress of Chemical and Process Engineering held in Prague in the Czech Republic (2010).
- Invitation to review papers for the ICheaP10 International Conference Peer reviewed conference 2010
- Invitation to write a book chapter in Biological Cr(VI) Reduction: Microbial Diversity, Kinetics and Biotechnological Solutions to Pollution (see publications).
- Invitation to present paper IWA World Water Congress Busan Korea in September 2012. The paper was selected for publication in Water Science and Technology Journal
- Dr Molokwane has Chaired the International Congress of Chemical and Process Engineering Conferences (Italian Association of Chemical Engineers) .
- Reviewer of the Environmental engineering and Biotechnology manuscripts for the Italian Association of Chemical Engineers (2009 and 2010) and Elsevier's Process Biochemistry Journal.
- Open invitation to conduct Bio Remediation research by the Chair of Environmental Engineering group at Kentucky University, US.
- One in a group of 3 Nuclear scientist who initiated a project on Nuclear Waste Minimisation which led to the establishment of a research collaboration activity between Pebble Bed Modular Reactor Pty Ltd and the University of Pretoria in Carbon 14 research/ Nuclear minimisation in which the design of the bio-filtration process to be used in the graphite reclamation processes which entails conversion of graphite to nano-size particles in slurry form bioseperation of carbon-14 from carbon-12 from the slurry is investigated. The initiative has established a fully fleshed licensed laboratory at UP that is and will continue to benefit the students.
- Nomination by PBMR EXCO as a Rising Star in 2008 and also received scarce skills award.

RESEARCH INTEREST

PhD topic: "Simulation of in situ bioremediation of chromium (VI) contaminated site using microbial barrier in groundwater aquifers"

This research was motivated by the need to develop cleanup technologies for hexavalent chromium contaminated sites in South Africa as a result of mining activities. One of these sites, the now defunct Africa Chrome sodium-dichromate processing plant in Brits (SA), is under cleanup operations funded by the Industrial Development Corporation (IDC) under the supervision of Envirochrome (Pty), Ltd.

Also interested in the development of environmentally friendly processes for immobilization of toxic heavy metals, toxic oxyanionic species of metals such Uranium, Rhodium, Technetium and other radionuclides in the environment. Biologically mediated systems of interest include in situ bioremediation, biological conversion, and reduction/precipitation processes for toxic metals and radionuclides in biological permeable reactive barriers.

The latest project on the "Sustainable Water Purification/Disinfection Using Botanical and Agro-Based Natural Compounds" utilises compounds from the legume – *Moringa oleifera* – plant seeds and extracts from the cactus – *Opuntia ficus* "prickly pear" – plant leaves as natural coagulants to replace chemical inorganic chemicals such as the traditional ferric chloride and aluminium sulphate coagulants. A spin off of the project is the identification of food products and economic activities that will be spawned from the use of the agro-based chemical products as coagulants.

Permitting and license application (e.g. Environmental Authorisations, Water Use Licences, Atmospheric Emissions Licences, Waste Licenses, Public participation, Rectifications and amendments of authorisations, Community engagement/public participation, Contaminated land analysis, Contaminated Land Assessments, Contaminated Land Monitoring and effluent management.

PUBLICATIONS

Book/s – Monologues

1 Chirwa E.M.N., Molokwane P.E., Matsena M.T., (2020). *Chromium in the Environment: Biochemistry, Remediation and Removal Kinetics*, John Wiley & Sons, Ltd., Chichester, West Sussex, United Kingdom (Accepted). [ISBN 978-111-8312-28-5]. (Under review).
2 Chirwa E.M.N., Molokwane P.E. (2020). *Environmental impacts and bioremediation of uranium (VI) and the transuranic elements*, Elsevier Science, Ltd, Cambridge, United Kingdom. (Under review).

Book Chapter/s

1. Chirwa E.M.N., Molokwane P.E., Lutsinge T.B., Igboamalu T.E., Birungi Z.S. (2020). Advances in bioremediation of toxic heavy metals and radionuclides in contaminated soil and aquatic systems. In Bharagava R.N., Saxena G. (Eds.), *Bioremediation of Industrial Wastes for Environmental Safety, Volume II: Biological Agents and Methods for Industrial Waste Management*, Chap. 2, pp. 21-52, Springer International, New York, NY, USA. [ISBN 978-981-13-3425-2]. DOI: 10.1007/978-981-13-3426-9.
2. Chirwa E.M.N. and Molokwane P.E. (2011). Biological Cr(VI) Reduction: Microbial Diversity, Kinetics and Biotechnological Solutions to Pollution. A. Sofo (Ed.), In Biodiversity, InTech Online Publishers, United Kingdom. Chapter 5, pp. 75-100. [ISBN 979-953307-256-1].

Journal Articles

1. Chirwa E.M.N., Molokwane P.E., Mtimunye P.J., Kholisa B., Jose M., Wang Y-.T. (2021), Comparative Pathway Analysis for Microbial Cr(VI) Reduction in Pure Cultures of *Bacillus thuringiensis* and *Escherichia coli* ATCC 33456. *Sustainability*. In Press.
2. Molokwane P.E., Kholisa B., Chirwa E.M.N. (2021), Modelling Cr(VI) Removal Dynamics in a Microbial Consortium System. *Water Research*. Accepted (minor revision).
3. Mbonambi N.C., Molokwane P.E., Chirwa E.M.N. (2021), Feasibility of Passive In Situ Reduction and Removal of Cr(VI) in Microbial Cr(VI) Reducing Bacteria Innoculated System. *Journal of Cleaner Production*. Accepted (minor revision).
4. Molokwane P.E. and Chirwa E.M.N. (2013). Modelling biological Cr(VI) reduction in aquifer microcosm column systems. *Water Science and Technology*. 67(12), 2733-2738.
5. Molokwane P.E., Chirwa E.M.N. (2011). Modelling biological Cr(VI) reduction in aquifer microcosm barrier systems. *Chemical Engineering Transactions*, vol. 24, pp. 1051-1056. ISBN 978-88-95608-15-0.
6. Molokwane P.E. and Chirwa E.M.N. (2009), Microbial culture dynamics and chromium (VI) removal in packed-column microcosm reactors, Water Science and Technology, 60 (2), 381-388.
7. Molokwane P.E., Meli K.C., and Nkhalambayausi-Chirwa E.M. (2008). Chromium (VI) reduction in activated sludge bacteria exposed to high chromium loading: Brits culture (South Africa). *Water Research*, 42 (17), 4538-4548.
8. Molokwane P.E., Meli C.K. and Chirwa E.M.N. (2008). Chromium (VI) reduction in activated sludge bacteria exposed to high chromium loading. *Water Science and Technology*, 58 (2), 399-405.

9. Molokwane P.E. and Chirwa E.M.N. (2006). Biological Cr(VI) reduction in indigenous sludge cultures from Gauteng, South Africa. *Water Science and Technology*, 54 (10), 177–184.
10. Mtimunye P.J., Lutsinge T.B., Molokwane P.E., Chirwa E.M.N. (2017). Cr(VI) remediation in groundwater aquifer media using natural organic matter as carbon source. PRES'17, Tiajing, China, 23-26 August 2017. In *Chemical Engineering Transactions*, vol. 61 pp., 1831 - 1836. [ISSN 2283-9216].
11. Molokwane P.E., Chirwa E.M.N. (2011). Modelling biological Cr(VI) reduction in aquifer microcosm barrier systems. *Chemical Engineering Transactions*, vol. 24, pp. 1051-1056. ISBN 978-88-95608-15-0.
12. Molokwane P.E., Chirwa E.M.N. (2009). Cr(VI) reduction in packed-column microcosm reactors using chromium reducing microorganisms. *Chemical Engineering Transactions*, vol. 18, pp. 863-868. ISBN 978-88-95608-04-4.
13. Chirwa E.M.N., Molokwane P.E., Mtimunye P.E., Kholisa B., Jose M., Wang Y.-T. (2020). Comparative Pathway Analysis for Microbial Cr(VI) Reduction in Pure Cultures of Bacillus thuringiensis and *Escherichia coli* ATCC 33456. *Journal of Environmental Chemical Engineering*. (Submitted).

Keynote Presentations

1. Chirwa E.M.N. (Keynote), Biological remediation and removal of radioactive metals and complex aromatic compounds from nuclear and radioactive waste, Authors: E. M. N. Chirwa, P. E. Molokwane, P. V. Tikilili, S. S. Makgato, E. E. Bamuza-Pemu, L. Jay, *23rd International Congress of Chemical and Process Engineering (PRES'18)*, 25-29 August 2018, Prague, Czech Republic.

Peer Reviewed National and International Conferences

1. Chirwa E.M.N. (Keynote), Roestorff M.M., Molokwane P.E., Igboamalu T.E., Matsena M. (2019). Comparative Pathway Analysis for Microbial Cr(VI) Reduction in Pure Cultures of *Bacillus thirungiensis* and *Escherichia coli* ATCC 33456. Proceedings of the 22nd *Conference on Process Integration for Energy Saving and Pollution Reduction* (PRES'19), 20–23 October, Agios Nikolaos, Crete, Greece.
2. Molokwane P.E. and Chirwa E.M.N. (2012). Modelling Biological Cr(VI) Reduction in Aquifer Microcosm Column Systems. IWA World Water Congress, 16-21 September, Busan, Korea.
3. Molokwane P.E. and Chirwa E.M.N. (2011). Modelling Biological Cr(VI) Removal in a Groundwater Contamination Barrier: Microcosm Simulations. ICheaP10 International Conference, 8-11 May 2011, Florence, Italy.
4. Molokwane P.E. and Chirwa E.M.N. (2011). Modelling Biological Cr(VI) Reduction in Aquifer Microcosm Column Systems. IWA Specialist Conferences, Water and industry, 1-4 May, Valladolid, Spain.
5. Mtimunye P.J., Manyisi D., Molokwane P.E and Chirwa E.M.N. (2010). Finite difference simulation of Cr(VI) reduction and concentration profiles in aquifer microcosm columns. 2nd International Conference on Chemical Engineering and Advanced Materials CEAM 2010-VF, 15th - 26th November.
6. Molokwane P.E. and Chirwa E.M.N. (2010). Chromium (VI) removal in a packed mesocosm reactor: simulation of a microbial barrier. IWA World Water Congress and Exhibition, 19–24 September 2010, Montréal, Canada.
7. Molokwane P.E. and Chirwa E.M.N. (2010). Kinetics of Cr(VI) reduction in a multi-species indigenous culture of bacteria – Brits Culture. 19th International Congress of Chemical and Process Engineering, 28 Aug - 1 Sept 2010, Prague, Czech Republic.

8. Molokwane P.E. and Chirwa E.M.N. (2010). In situ bioremediation of Cr (VI) in mesocosm reactors using biological permeable reactive barrier. 19th International Congress of Chemical and Process Engineering, 28 Aug - 1 Sept 2010, Prague, Czech Republic.
9. Molokwane P.E. and Chirwa E.M.N. (2010). Chromium (VI) removal in a packed mesocosm reactor. Water Insititute of Southern Africa Biennial Conference and Exhibition (WISA 2010), 18-22 April 2010, Durban, South Africa.
10. Molokwane P.E. and Chirwa E.M.N. (2010) In Situ Bioremediation of Chromium (VI) Contaminated Aquifer Media using Microbial Barrier-Mesocosm Study, Young Water Professionals Conference (YWP2010), January, 18-19, CSIR Convention Centre, Pretoria,South Africa.
11. Molokwane P.E., Meli C.K. and Chirwa E.M.N. (2009). Microbial dynamics in a microcosm culture reactor treating Cr(VI). 6th Leading-Edge Conference on Water and Wastewater Technologies (LET2009), 23-25 June 2009, Singapore.
12. Molokwane P. and Chirwa E., (2009), Cr(VI) reduction in packed-column microcosm reactors using chromium reducing microorganisms, Chemical Engineering Transactions, 18, 863-868.
13. Molokwane P.E., and Chirwa E.M.N. (2009). *In Situ* Bioremediation of Chromium (VI) Contaminated Groundwater Aquifer Media: Microcosm Studies. 4th International Symposium on Bio- and Hydrometallurgy (BioHydromet 09), April 6-7, 2009, Vineyard Hotel, Cape Town, South Africa.
14. Molokwane P.E. and Chirwa E.M.N. (2009). Bioremediation Of A Cr(VI) Contaminated Site: A Conceptual And Feasibility Study For A Site In Brits. 24th International Conference on Solid Waste Technology and Management. 15 - 18 March 2009, Philadelphia, PA.
15. Chirwa E.M.N. and Molokwane P.E. (2009). Nuclear Waste Minimisation For New Generation Nuclear Reactors – Carbon-14 Bioseparation. 24th International Conference on Solid Waste Technology and Management. 15 - 18 March 2009, Philadelphia, PA.
16. Chirwa E.M.N., Meli K.C., Molokwane P.E., and Ngwenya N., (2008). "Conceptual model for heavy metal removal and reclamation during graphite pebble reprocessing." *Proc. 2008 Waste Management Conference*, 24-28 February 2008, Phoenix, Arizona.
17. Molokwane P.E., and Chirwa E.M.N. (2008). Biological Removal of Radiocarbon-14 from Irradiated Graphite. 2008 *Waste Management Conference*, 24-28 February 2008, Phoenix, Arizona.
18. Molokwane P.E., Meli K.C., and Chirwa E.M.N. (2008). Bioremediation of a Cr(VI) contaminated site: a conceptual and feasibility study for a site in Brits. *Proc. 2008 WISA Biennial Conference and Exhibition*, 18-22 May 2008, Sun City, South Africa.
19. Meli C.K., Molokwane P.E., and Chirwa E.M.N. (2008). Characterisation of Cr(VI) reducing microbial cultures isolated from dried sludge: a performance comparison study. *Proc. 2008 WISA Biennial Conference and Exhibition*, 18-22 May 2008, Sun City, South Africa.
20. Meli K.C., Matobole K., Molokwane P.E. and Chirwa E.M.N. (2008). Modelling Cr(VI) reduction in a mixed culture environment. *Proc. 18th International Congress of Chemical and Process Engineering* (CHISA 2008), 24-28 August 2008, Prague, Czech Republic.
21. Meli K.C., Matobole G.K., Molokwane P.E., and Chirwa E.M.N. (2008). Characterisation and optimisation of activated sludge culture from Brits (SA) capable of high performance chromium(VI) reduction. *Proc. 18th International Congress of Chemical and Process Engineering* (CHISA 2008), 24-28 August 2008, Prague, Czech Republic.
22. Molokwane P.E., and Chirwa E.M.N. (2008). Bioremediation of a Cr(VI) contaminated site: a conceptual and feasibility study for a site in Brits. *Proc. 11th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction* (PRES 2008). 24-28 August 2008, Prague, Czech Republic.
23. Molokwane P.E., Meli C.K. and Chirwa E.M.N. (2008). Chromium (VI) reduction in activated sludge bacteria exposed to high chromium Loading. *Proc. 6th IWA World* Water Congress and Exhibition, 7-12 September 2008, Austria Center, Vienna, Austria.

24. Meli C.K., Bamuza-Pemu E.E., Molokwane P.E., and Chirwa E.M.N. (2007). Conceptual Application of Biological Removal of Toxic Metals: In Situ Cr(VI) Reduction. *Proc. 10th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction* (PRES 2007). 24-27 June 2007, Ischia, Naples.
25. Molokwanne P.E. and Chirwa E.M.N. (2007). Development of a carbon-14 bioseperation technique for irradiated graphite to facilitate graphite-carbon reclamation. *11th Internation Conference on Environmental Management* (ICEM 2007), September 2-6, Bruges, Belgium.
26. Molokwane, P.E., and Chirwa, E.M.N., (2006). Culture induced enhancement of biological Cr(VI) reduction in indigenous activated and digester sludge cultures in South Africa. *Proc. IWA World Water Congress and Exhibition*, September 10-14, 2006, Beijing, China.

Scientific Reports

1. Microbial Interventions for Nuclear Waste Minimisation for the PBMR technology. Funded by the Pebble Bed Modular Reactor Company (PBMR). Evans M. N. Chirwa (Principal Investigator), (Doctoral Researcher: Miss. P.E. Molokwane), Department of Chemical Engineering, University of Pretoria, Pretoria, South Africa. (2006-2009).

LANGUAGE COMPETENCIES

Speak, read and write:		English, Afrikaans, and Tswana
Fairly understand	:	Xhosa, Zulu, and Ndebele

COMPUTER LITERACY

Have modelled and worked with the programmes – MATHCAD and FORTRAN 77, SIGMAPLOT version 9.01, SIGMASTAT version 3.21 and AQUASIM version 2.1. User of MS DOS, MS Windows, Microsoft Office, PowerPoint and Excel.

REFERENCES

To be provided at request.