

## Dr Busiso Mtunzi



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**Designation:** Senior Lecturer

**Academic Qualifications:-** PhD Physics- Renewable Energy (UFH –SA), MSc Renewable Energy. (UZ - Zimbabwe), BTech (Hons) Applied Physics. (UZ-Zimbabwe)

**Research interests:-** Electrical Machines and Drives; Renewable Energy (Solar Thermal and Photovoltaics)

**Publications:-**

1. Mtunzi, B. and Meyer, E.L., (2014). [Benchmarking of the SW80 Polycrystalline silicon modules using the sun as source of light](#). Thermal Science International Scientific Journal. Thermal Science 18 (2), S317-S322
2. Mtunzi, B. and Meyer, E.L., (2012). Comparative study of a directly cooled PV water heating system to a naturally cooled module in South Africa. [Photovoltaic Specialists Conference \(PVSC\), 2012 38th IEEE](#) pp.001296 - 001299.
3. Mtunzi, B., Meyer, E.L., Simon, M. and Malape, M.A., (2012). Variations in the I/V Characteristics of Directly Water Cooled and Naturally Cooled PV Modules. 27th European Photovoltaic Solar Energy Conference and Exhibition, pp 3992 – 3996. ISBN:3-936338-28-0.
4. Mtunzi, B., Mampwheli, N., Meyer, E.L., and Mungwena, W., (2012). Bagasse based co-generation at Hippo Valley Estates in Zimbabwe. South Africa Journal of Energy in South Africa, Vol 23, No 1, pp. 15-22
5. Mtunzi, B., Meyer, E.L. and Simon, M., (2015). Thermal and Electrical Energy Yield analysis of a directly water cooled Photovoltaic Module. *Thermal Science International Scientific Journal*. Thermal Science 19 (2), S547-S555.
6. Mtunzi, B., Meyer, E.L., (2015). Design and Implementation of a direct cooled PV/T system. Journal of Engineering, Design and Technology. Journal of Engineering, Design and Technology 13 (3), 369-379.
7. Mtunzi, B., Meyer, E.L. and Simon, M., (2011). Investigating the thermal performance of a hybrid photovoltaic solar system, *In Proceedings of SAIP2011, the 56<sup>th</sup> Annual Conference of the South African Institute of Physics, Edited by I Basson and A. E Botha (University of South Africa, Pretoria, 2011)*, pp. 694-700. ISBN: 978-1-86888-688-3  
**Available online at** <http://www.saip.org.za>

8. Mtunzi, B., Meyer, E.L. and Simon, M., (2012). Performance monitoring of a photovoltaic thermal collector. *57<sup>th</sup> Annual Conference of the South African Institute of Physics*.
9. Mtunzi, B., Chamisa., M., Nyath Z.M., Gonye R. and Mugarisanwa, F.N., (2016). Centralised incubator control system. *Zimbabwe Journal of Science and Technology Vol (11)*, pp 12-27. e-ISSN 2409-0360.

#### **CONFERENCE PAPERS**

1. Mtunzi, B. and Meyer, E.L., (2010). Thermal performance of a Photovoltaic Water heating System (PVWHS). *55<sup>th</sup> Annual Conference of the South African Institute of Physics (SAIP)*
2. Mtunzi, B. and Meyer, E.L., (2009). Thermography analysis of hot Spots on a PV module. *54<sup>th</sup> Annual Conference of the South African Institute of Physics (SAIP)*.
3. Mtunzi, B. and Meyer, E.L., (2012). Energy supply for sustainable tourism in South Africa. University of Fort Hare/National Department of Tourism student mini conference at the University of Fort Hare on the 26<sup>th</sup> September 2012.

Affiliations:

SAIP:- South Africa Institute of Physics

FUNAE:-