

## Curriculum Vitae

### **PATRICK TONUUI**

E-mail jefftonui2006@yahoo.com

Mobile 0720275462 & 0733233233

P.O. Box 105-20210

Litein

**Personal Details** *Date of Birth:* January 1972

*Marital Status:* Married

*Nationality:* Kenyan

*Gender:* Male

*Language:* English and Kiswahili

*Religion:* Christian

### **Professional Qualifications**

*August 2015-Dec 2018:* PhD Student Experimental Condensed Matter Physics, University of KwaZulu-Natal, School of Chemistry & Physics, PMB Campus, Private Bag X01, Scottsville 3209, South Africa  
Tel.: +27834874326, & +254720275462

*Jan 2005-Feb 2007:* Master of philosophy in physics (Electronics Moi University Eldoret, Kenya.

*Dec 1990-Mar1995:* Bachelor of Education Science (physics/chemistry) Kenyatta University Nairobi, Kenya

*Feb1986-Nov 1989:* Kenya Certificate of Secondary Education (KCSE) Kabianga High School Kericho, Kenya.

*Jan1978-Nov1985:* Kenya Certificate of Primary Education (KCPE). Rungut Primary School Bureti, Kenya.

### **Computer Skills**

*2004/2005:* Certificate in computer Operations (packages) and Electronics Softwares' Electronics Workbench V 5.12, Multisim 2001 Textbook Edition, Matlab(Simulink), Origin, Latex, ChemDraw and EndNote.

### **Publications:**

Tonui, P., Oseni, S. O., Sharma, G., Yan, Q., & Mola, G. T. (2018). Perovskites photovoltaic solar cells: An overview of current status. *Renewable and Sustainable Energy Reviews*, *91*, 1025-1044.

Tonui, P., Arbab, E. A. A., & Mola, G. T. (2019). Metal nano-composite as charge transport co-buffer layer in perovskite based solar cell. *Journal of Physics and Chemistry of Solids*, *126*, 124-130.

Tonui, P., Mola, G. T. (2019). Electron transport co-buffer layer for improved charge extraction in polymer solar cell

Wafula, H. B., Musembi, R. J., Juma, A. O., Tonui, P., Simiyu, J., Sakwa, T., ... & Verma, K. D. (2017). Compositional analysis and optical properties of Co doped TiO<sub>2</sub> thin films fabricated by spray pyrolysis method for dielectric and photocatalytic applications. *Optik*, *128*, 212-217.

Mbuyise, X. G., Tonui, P., & Mola, G. T. (2016). The effect of interfacial layers on charge transport in organic solar cell. *Physica B: Condensed Matter*, 496, 34-37.

Tessema Mola, G., Mbuyise, X. G., Oseni, S. O., Dlamini, W. M., Tonui, P., Arbab, E. A., ... & Maaza, M. (2018). Nanocomposite for solar energy application. In *Nano Hybrids and Composites* (Vol. 20, pp. 90-107). Trans Tech Publications.

### **Research Experience**

-Simulation of Master of philosophy dissertation using Matlab (Simulink) of an FM communication system.

-Fabrication and characterization of solution processed thin film solar cells (Perovskites).

### **Responsibilities**

*June 1995-Nov2009*: High School Teacher (Physics/Chemistry).

*Jan 2001-Nov 2005*: District Secretary (Bureti) Student congress on science and technology

*Jan 2004-Aug 2004*: District trainer-Bureti district-Strengthening of Mathematics and Sciences in Secondary Education (SMASSE)

*2004 –Jan 2010*: Head of Science department- Chebwagan Secondary School (Bureti district)

*August 2008* Kenya Education Institute course

*Nov 2007to 2009*: Part-time lecturer Moi University (Kabianga campus)

*Jan 2010 to the present*: Lecturer Masinde Muliro University of Science and Technology.

*2013-2015*: Executive Board member AIC Litein Girls Sec School

*2019- :* Chairman Board of Management Kamanamsim Sec & Chebagal Primary Schools

### **Conferences**

*1-5 Oct 2018*: Postgraduate Spring School on Solar Energy and Photosynthesis, University of Pretoria, South Africa.

*25<sup>TH</sup> Oct 2018*: Postgraduate Research & Innovation Symposium, University of Kwazulu-Natal, Durban South Africa.

### **Research Interests:**

Renewable Energy (Organic Photovoltaics-Perovskite Based solar cells), solar Energy and Photosynthesis.

**Referees** 1) Proff. Rotich S.K+254721614367 2). Proff. Mola G.T. +27715088211

Head of physics department UKZN, School of Chemistry and

Moi University Physics, PMB Campus

P.O. Box 1125 Private Bag X01, Scottsville 3209, Eldoret- Kenya South Africa

*Page last updated on 27th April 2021*