Jerry Ochola (PhD Mat. Eng.)

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PERSONAL

Place of Birth: Kenya

Date of Birth: January 8, 1982

Sex: male

Language(s): English, Swahili, Luo(Kenya)

EDUCATION

University of Pavia, Pavia, Italy

Post-Doc Fellowship,

July, 2019

Project Title: Simulation of Biomechanical Structures for Repair of Fracture Femoral bones

Brief Synopsis: application of python programming and finite element analysis techniques for modelling and simulation of the potential of tubular textiles in repairing Femoral bones.

Ghent University, Ghent, Belgium

Doctor (PhD) of Materials Engineering

June 2017

Dissertation Title: Mechanical Modeling of Tubular Biomedical Textile Structure for Repair of Ruptured and Degenerated Tendons.

Brief Synopsis: The use of finite element analysis techniques for modelling and parametric analysis of feasibility of tubular biomechanical textiles in repairing tendons.

Moi University, Eldoret, Kenya

Master of Science (MSc) in Textile Engineering

December 2011

Thesis: Modeling the influence of Fibre Properties on Yarn Parameters Using Statistical techniques and Artificial Neural Networks

Moi University, Eldoret, Kenya

Bachelor of Technology (BTech) in Textile Engineering

October 2007

EMPLOYMENT

Lecturer

Moi University, Eldoret, Kenya

Department of Manufacturing Industrial & Textile Engineering

2013—Present

Research Scientist

Kenya Industrial Research and Development Institute (KIRDI), Nairobi, Kenya

Textile Engineering Department

2012-2013.

Assistant Manager

Rivatex East Africa Limited, Eldoret, Kenya

Production Department

2008-2012

Postgraduate Students Supervision

s/n	Student Name	University	Date
1	Helene Granval	Ghent University	2014 - 2015
2	Attiya Musa	Ghent University	2015 - ongoing
3	Joan Jepkosgei	Moi University	2015 - ongoing
4	Pharez Chida	Moi University	2017 - ongoing
5	Jackson Birir	Moi University	2017 - ongoing
6	Winnie Tanui	Moi University	2018 - ongoing
7	Brian Bett	Moi University	2018 - ongoing

RESEARCH PROJECTS

Project title: Development of Tubular structures for repair of ruptured and degenerated tendons

Funding: VLIR-UOS program, Belgium

Role: Principal researcher

Status: Ongoing

Project title: Simulation of Biomechanical Structures for Repair of Fracture Femoral bones **Funding:** Post Doc Research Fellowship - CICOPS scholarship, University of Pavia, Italy

Role: Researcher Status: Ongoing

PUBLICATIONS

Patent

Innovation of repair of ruptured and degenerated tendon using fibrous textile structures. (2013). Ghent University Techtransfer. Proof of concept – in progress

Journal papers

Jerry Ochola, Mathias Peirlinck, Ian Peeters, Benny Malengier, Matthieu De Beule, John Githaiga, Lieven De Wilde and Lieva Van Langenhove (2018) Feasibility of Reinforcing Suture Repaired Tendon Using a Tubular Braided Fabric: Finite Element Study (**Under Review**)

Jerry Ochola, Benny Malengier, Lode Daelemans, John Githaiga and Lieva Van Langenhove. (2017) Experimental and Numerical Analysis of the Tendon Repair Process using Tubular Braided Fabrics. AUTEX Research Journal, DOI: 10.1515/aut-2017-0007. (Impact Factor: 0.716, 2017).

Jerry Ochola, L. Daelemans, B. Malengier, L. Van Langenhove. (2016) Finite Element Simulation of the Deformation Behaviour of Tubular Braided Structures for Biomedical Applications Subjected to Tensile Loading. Textile Research Journal. Textile Research Journal. 0(00) 1–9. DOI: 10.1177/0040517516651106. (Impact Factor: 1.443, 2016).

Books

Jerry Ochola. (2017). Mechanical Modeling of Tubular Biomedical Textile Structure for Repair of Ruptured and Degenerated Tendons. Ghent University Press. (Belgium). ISBN 978-94-6355-012-3.

Jerry Ochola, J. Igadwa and E. Oyondi. (2011). Modeling the influence of fiber properties on yarn parameters. Lambart Academic Publishers (Germany). ISBN 978-3-8473-1775-3.

Conference proceedings

Jerry Ochola, Benny Malengier, John Githaiga and Lieva Van Langenhove (2016). Analysis of parameters influencing the jamming effect in circular braids. WIT TRANSACTIONS ON THE BUILT ENVIRONMENT. 166. p.1-9.

Jerry Ochola, Benny Malengier and Lieva Van Langenhove (2016). Approximating elastic modulus of a tubular braided fabric under compressive deformation using FEM and experimental data. Autex World Conference 2016. p.1-6.

Jerry Ochola, B. Malengier, J. Githaiga, L. Van Langenhove, (2015). Analysis of Parameters influencing the Jamming Effect in circular Braids. 7th International Conference on Computational Methods and Experiments in Materials Characterisation. 22 - 24 April, Valencia, Spain.

Jerry Ochola and Lieva Van Langenhove. (2014). Modeling a 3D braided structure using pyformex. 14th AUTEX World Textile Conference.

REFEREES

- Prof. Lieva VanLangenhove Professor of Smart Textiles, Ghent University Technologiepark Zwijnaarde 907, 9052 Zwijnaarde, Ghent- Belgium phone: +32 (0) 9 264 54 19; email: lieva.vanlangenhove@ugent.be
- Prof. Ambrose Kiprop
 Dean School of Biological & Physical Sciences
 Moi University, P.O. Box 3900, Eldoret 30100, Kenya
 phone: +254 (0) 719 241 704, email: ambkiprop@gmail.com
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 Lecturer and Scientific staff, Ghent University
 Technologiepark Zwijnaarde 907, 9052 Zwijnaarde, Ghent- Belgium phone: +32 (0) 9 264 54 07; email: benny.malengier@ugent.be