

EDISON OMOLLO ODUOR
P.O. Box19302-00100, Nairobi
Tel: +254721 857 685
Email: edisonomollo@gmail.com

.....
I am a polished textile engineer, researcher and academician willing to transfer my textile knowledge and skills obtained over the years for the advancement of our country's long and short term goals. I hope to bring sufficient expertise and knowledge to your organization and make a milestone contribution towards achieving your goals and objectives.
.....

Personal Details

- Date of Birth: 13th October 1986
- Nationality: Kenyan
- Gender: Male
- Marital Status: Married

Education and Professional Qualification:

- Doctor of Philosophy, Fashion and Textile Technology, The Technical University of Kenya, Nairobi, Kenya; July 2016-Present
Research Topic: *'Assessment of the Impact of Environmental Conditions on Silk Fiber and Fabrics produced by Eri Silkworm (Philosamia ricini) reared on Castor (Ricinus communis) Plant in Semi-dry Land (Makueni) and Wet Climate (Nairobi)'*
- Masters of Engineering in Textile Engineering, Donghua University, Shanghai, China, 2011-2014
M.Sc. Thesis: *'Electrospinning of cellulose acetate, property analysis and fabrication of PP/CA/PP composite filter'*.
- Bachelor of Technology, Textile Engineering, Moi University, Second Class Honours, Upper Division, 2005-2010
Final Year Project: *'A study on ways to reduce the time of exposure of textile materials during the soil burial test'*.
- Kenya Certificate of Secondary Education, Chebisaas Boys High School, Eldoret, MeanGrade: A-, 2001-2004

Key Professional Skills and Competencies:

- A sound understanding of various research methodologies and data analysis for both quantitative and qualitative research.
- A sound understanding of textiles, its processing, testing and the entire textile value chain
- A research background working with small scale farmers involved in Eri silk fiber production and processing in Kenya
- An excellent communicator with proficient English and Kiswahili and basic Chinese
- Good data analysis skills with good planning and forecasting services
- Ability to be wise enough to discern difficult choices with precision and/or methodology
- An ability to foster confidence in diverse situations and exercise full command of a project
- Ability to be honest, with excellent interpersonal and time management skills
- Ability to pay attention to detail and offer constructive feedback in grant proposal writing

- Proficient in Statistical analysis computer applications, namely; Origin, Minitab and SPSS

PROFESSIONAL EXPERIENCE

Employment;

TEXMAT Engineering Consultants, August 2019-Present (Co-founder and Director);

TEXMAT is a company that offers research and advisory services in textiles and materials engineering in order to promote sustainable development of the textile and materials industry in Sub-Saharan Africa

Duties and Responsibilities:

- Co-manage running operations of the company
- Participate in proposal writing for various project applications
- Director, Textile Division i.e. to provide guidance for textile and apparel related projects
- Review of various components of the textile value chain in Africa and write review articles to highlight opportunities for growth and improvement.
- Conduct research and analysis
- Explore new collaborations and partnerships

The Technical University of Kenya, September 2014-Present (Lecturer);

Technical University of Kenya is a first Kenyan technical public university.

Duties and Responsibilities:

- Lecturing courses, giving demonstrations and conducting tutorials, practical classes and field courses in the Department of Fashion, Clothing and Textiles. Courses taught include;
 - Research Methodology and Proposal Writing
 - Textile Testing
 - Textile Fibres
 - Fabric Construction Methods
 - Physical Sciences
 - Basic Mathematics
- Engaging in research, advancement and dissemination of knowledge.
- Taking part in consultancy, innovation and technology transfer in Textile Technology field.
- Setting, grading and administering examinations.
- Undertaking duties as devolved by senior academic staff members.
- Curriculum review in the department of Fashion Design and Textile Technology.

Machakos University, August 2016-May 2019 (Adjunct Lecturer)

Machakos University is a Kenyan public university.

Duties and Responsibilities:

- Lecturing courses, giving demonstrations and conducting tutorials, practical classes and field courses in the Department of Fashion Design and Marketing. Courses taught include;
 - Research Methodology and Proposal Writing
 - Textile Design Application
 - Textile Performance Testing
 - Surface Decoration
 - Weaving

- Fashion Fabrics
- Care of Textile Products
- Engaging in research, advancement and dissemination of knowledge.

Moi University, June 2014-September 2014 (Tutorial Fellow);

Moi University is a Kenyan Public University.

Duties and Responsibilities:

- Lecturing courses assigned by the HOD in Industrial and Textile Engineering Department.
- Assisting senior academic staff members in assignments allocated by the HOD.
- Providing professional and community services and initiate linkages.

Kenya Bureau of Standards (KEBS), November 2010-August 2011 (Testing Officer);

KEBS is a national standards body providing metrology, standardisation and conformity assessment services in Kenya.

Duties and Responsibilities:

- Tested textile fibers, yarns, fabrics and apparels according to applicable Kenyan standards and ISO standards for quality control and assurance, import conformance and for Kenya standards development
- Responsible for data entry of test results into the Laboratory Information Management System (LIMS), a software for data management in the laboratory
- Writing detailed sample test reports
- Executed general laboratory housekeeping duties

Consultancy;

HEVA Fund PLC, August 2019-September 2019;

HEVA fund is a private company engaged in the development of creative industries in Kenya and in East Africa region, specializing in finance, firm level business support, skills transfer along with public sector engagement in order to underwrite sustainable growth.

Duties and Responsibilities:

- To provide a written professional opinion and advisory on the research design process, research questions, tools and methodologies;
- To provide a written opinion on the analytical frameworks and presentation of insights from the generated information;
- To actively participate in the necessary meetings or convenings, prepared to support this advisory role;
- To prepare a brief project report regarding their engagement at the close of the appointment period.

Tosheka Textiles Ltd., January 2017-Present;

Tosheka Textiles is a Kenyan based social entrepreneurial company that specializes in the production of high-quality silk.

Duties and Responsibilities:

- Research and production optimization for profitability
- Dissemination of research findings
- Offering training and skills upgrading for staff

Internship;**Color Creations Limited, May – July, 2009;**

Color Creations Ltd., is one of the leading branding companies in Kenya.

Duties and Responsibilities:

- Involved in Textile and PVC printing on both the manual and automatic screen printing machine for branding purposes including ink mixing for screen printing and preparation of screens prior to printing
- Involved in embroidery of Textile fabrics and apparels
- Writing detailed production analysis and reports for the production manager

Internship;**Kenya Bureau of Standards (KEBS), June –September, 2008;**

KEBS is a national standards body providing metrology, standardisation and conformity assessment services in Kenya.

Duties and Responsibilities:

- Preparation of textile samples (fibers, yarns, fabrics, apparels) for analysis
- Preparation of apparatus/equipment for textile analytic work
- Chemical/physical analysis of various textile samples to ascertain declared parameters
- General laboratory housekeeping duties, data entry and storage

Professional Engagements at University:

- Ag. Chairman of Department;
Fashion and Textile Technology (16th Nov 2016 -8th March, 2017)
Technical University of Kenya, Nairobi
- Member;
Faculty Curriculum Development Committee (4th June, 2015 – to date)
- Champion;
ISO 9001:2008 Quality Assurance – Department of Fashion and Textile Technology
Technical University of Kenya, Nairobi

Trainings, Seminars and Workshops Attended:

- CBET Methodology for Pedagogical Leaders and Trainers by TVET CDACC at College of Insurance, Nairobi, 26th - 29th August, 2019
- Job Analysis and Evaluation Training by PwC and Salaries and Remuneration Commission (SRC), March 2017
- Basic training on spectroscopy testing equipment, microscopy imaging and thermal analysis i.e. UV-Vis, FTIR, XRD, SEM, DSC, TGA etc., Training during masters study (2011-2014)
- Attended a Workshop planning, building and management of Science Parks and Incubators by (Shanghai Co-Way International Technology Transfer Centre in China, 2012)

Awards:

- National Research Fund Award, 2016 (Ph.D. Grant, USD 12,000)

- Received a Shanghai Municipal Government Scholarship Award in 2011 to study Master of Science in Textile Science and Engineering at Shanghai, China

Funded Research Projects:

- Assessment of the Impact of Environmental Conditions on Silk Fiber and Fabrics produced by Eri Silkworm (*Philosamia ricini*) reared on Castor (*Ricinus communis*) Plant in Semi-dry Land (Makueni) and Wet Climate (Nairobi) – National Research Fund (Kenya) 2016-2019; Amount: USD 12,000
- Electrospinning of cellulose acetate, property analysis and fabrication of PP/CA/PP composite filter – Shanghai Municipal Government; Tution Fees, Stipend and Research Fund

Featured Reviewer:

- Journal of Industrial Textiles
- Textile Research Journal

Research Interests:

- Electrospinning of polymeric textile fibers for various applications
- Textile nonwovens and conventional textile fabric modification
- Textile fibers and fabric testing
- Natural dyeing of textile fibers

Publications

Books

- **Edison Omollo**, 2016, Fabrication of Cellulose Acetate Composite Filter; Electrospinning of cellulose acetate, property analysis and fabrication of PP/CA/PP composite filter, Lambert Academic Publishing, ISBN 978-3-659-92169-8.

Publications in Refereed Journals:

- **Edison Omollo**, Ciera, Lucy, Adolkar, Vijay, & Pido, Odoch. (2019). Effect of Conventional Degumming Methods on Eri Silk Fibers produced in Kenya. *Research Journal of Textile and Apparel*, paper in press
- **Edison Omollo**, Ciera, Lucy, Adolkar, Vijay, & Pido, Odoch. (2019). Physical Characterization of Eri Silk Fibers Produced in Kenya. *Journal of Natural Fibers*, 1-12.
- **Edison Omollo**, Jacob Koech, Edwin Kamalha and Vijay Adolkar. (2018). Morphological and Mechanical Analysis of Polyamide-66/Poss Nanocomposite Fiber: *Material Science; An Indian Journal* – Paper in Press
- Edwin Kamalha, Jovan Kiberu, Ildephonse Nibikora, Josphat Igadwa Mwasiagi and **Edison Omollo**. (2018). Clustering and Classification of Cotton Fiber Quality using Principle Component Analysis, Agglomerative Hierarchical clustering (AHC), and k-means Clustering: *Journal of Natural Fibers*, 15(3), 425-435

- Jacob Koech, **Edison Omollo**, Fredrick Nzioka and Josphat Igadwa. (2017). Thermal Analysis of Polyamide-66/POSS nanocomposite fiber: *International Journal of Engineering and Technical Research*, 7(4), 35-40
- **Edison Omollo**, Lucy Ciera, Vijay Adolkar and OdochPido. (2016). Eri Silkworm rearing practices in Kenya: *Journal of Entomology and Zoology Studies*, 4(5), 197-201
- **Edison Omollo**, Zhang, C.Y., Mwasiagi, J.I., and Ncube, S. (2016)., Electrospinning Cellulose Acetate Nanofibers and a study of their possible use in High Efficiency Filtration - *Journal of Industrial Textiles*, 45 (5), 716-729
- **Edison Omollo**, Josphat Igadwa Mwasiagi and Fred Nzioka Mutua. (2015). Preliminary Study regarding the Effects of Different Soil Treatments on the Strength of Canvas Material during the Soil Burial Test: *Tekstilec*, 2015, letn. 58(4), str. 262–267 (DOI: 10.14502/Tekstilec2015.58.262–267)
- **Edison Omollo**, Josphat Igadwa Mwasiagi, Mbwana Suleiman Ndaro, Lusweti Kituyi and Simiyu Sitati. (2015). A study of the Quality of Kenyan Cotton Rotor Spun Yarn: *African Journal of Textile and Apparel Research*, Vol. 1, Issue 1, Pg 13-17
- Lucy Ciera, Fredrick Nzioka, Naomi Wangari and **Edison Omollo**. (2015). Characterization of PET fibers incorporated with bacteria spores: *Material Science, An Indian Journal* 13(11), 353-358
- Josphat Igadwa Mwasiagi, Winnie Tunoi, Jacob Ngadia, John Lusweti Kituyi, Lodrick Wangatia and **Edison Omollo**. (2015). An investigation of the concentration and performance of locally produced cotton desizing enzyme: *African Journal of Textile and Apparel Research*, Vol. 1, Issue 1, Pg 33-37
- Fredrick Nzioka, **Edison Omollo**, Edwin Khamala, Josphat Mwasiagi, Lucy Ciera and Yimin Wang. (2015). A Study of the Characteristics of Hollow Glass Microspheres Reinforced Thermoplastic Polyurethane Composite Foam: *Research and Reviews in Polymer*; 6(1), 018-031
- Ndlovu, L.N., Siddiqui, Q., **Edison Omollo**, and Chongwen, Y.(2015), Physical properties of plain single jersey knitted fabrics made from blended and core spun polysulfonamide(PSA)/cotton yarns – *Textile Research Journal*, 85 (3), 262-271
- Tusiimire, Y., Zhang, C.Y., and **Edison Omollo**. (2014). Cellulose acetate (CA) as an alternative for Polymethylmethacrylate (PMMA) in relation to absorption properties of blended electrospun poly (vinylidene fluoride) (PVDF) Membrane – *Cellulose*, 21, 2811-2818 DOI: 10.1007/s10570-014-0296-1
- **Edison Omollo**, Zhang, C.Y., Mwasiagi, J.I., Tusiimire, Y., and Ndlovu, L. (2014), A Study of the Effects of Aging the Spinning Solution during the Electrospinning of Cellulose Acetate Nanofibers: *Research and Reviews in Polymer*, 5(1), 19-28
- **Edison Omollo**, Zhang, C. Y., Liu, W. J., and Sizo, N. (2013). A Study of Optimum Conditions for Electrospinning Cellulose Acetate Nanofibers in Trifluoroacetic Acid Solvent; *Advanced Materials Research*, 750, 323-327

- Ncube, S., Zhang, C. Y., **Edison Omollo**, & Liu, L. (2013). Effect of Time and Temperature when Removing PVA from a PET/PVA Nonwoven Material; *Advanced Materials Research*, 821, 188-194

Conference Papers:

- Mwasiagi Josphat Igadwa, Mirembe Jacquirine, Agulei Karen Desta and **Edison Omollo**. (2016). A Study of yarn imperfections for basofil/cotton rotor spun yarn:2016 *Sustainable Research and Innovation Conference, Kenya School of Monetary Studies, Nairobi, Kenya, May 4-6th, 2016*, pp.46-51
- **Edison Omollo**, Winnie AumaOtieno, Josphat Igadwa Mwasiagi, Fredrick Nzioka, and Ambrose Kiprop; A Study into Potential Ways of reducing the testing time Textile Materials during Soil Burial Test; *3rd Annual international conference on Cotton, Textile and Apparel value chain in Africa (CTA2014), Bahir Dar University, Bahir Dar, Ethiopia, May 2 and 3, 2014*, pp. 157-166
- Josphat Igadwa Mwasiagi, Lodrick Wangatia, **Edison Omollo**, Ambrose Kiprop; Use of LMBP, LMBP- DE, LMBP-PSO algorithms to predict cotton yarn strength; *3rd Annual international conference on Cotton, Textile and Apparel value chain in Africa (CTA2014), Bahir Dar University, Bahir Dar, Ethiopia, May 2 and 3, 2014*, pp. 48- 59
- Fredrick Nzioka, **EdisonOmollo**, Edwin Kamalha, Wang Yimin; HGMS/ TPU Composite Foam in Value Addition of Cotton Fibre Sports Gear, presented at the *2nd International Conference of iOTEX on "Cotton, Textile and Apparel Value Chain in Africa" on May 2013 in Bahir Dar, Ethiopia*

Professional Memberships:

- Engineers Board of Kenya; Graduate Engineer (B8339)

Co-curricular Activities:

- International Students Coordinator, Society for the Advancement of Material and Process Engineering (SAMPE), Donghua University, China
- Organizing Committee Member for the Technology Students Expo at Moi University

Interests:

- Research, Proposal Writing, Reading, Travelling and Socializing

REFEREES

Please feel free to contact the under mentioned in regard to my competence, work ethic and performance.

Prof. O.B. Makopondo

Technical University of Kenya
P.O.Box 52428 (00200),
Nairobi, Kenya
Tel: +254703866356
Email: rmakopondo@yahoo.com

Dr. Lucy Ciera

Technical University of Kenya
P.O.Box 52428 (00200),
Nairobi, Kenya
Tel: +254721422802
Email: lucyciera2@gmail.com

Prof. Josphat Mwasiagi

School of Engineering,
Moi University,
P.O. Box 3900 (30100),
Eldoret, Kenya
Tel: +254725868329
Email: igadwa@gmail.com