

# Veronica Kavila Ngunzi

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## **Personal Details**

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Gender:	Female	Email:	<a href="mailto:vngunzi@yahoo.com">vngunzi@yahoo.com</a>
Date of birth:	22 <sup>nd</sup> April, 1984		<a href="mailto:vngunzi@gmail.com">vngunzi@gmail.com</a>
Nationality:	Kenyan	Address:	P. O Box 11654, 00100
Tel:	+254 727-953865, +254732-953865		Nairobi.
		Language:	English, Swahili

## **Profile**

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Enthusiastic Energy professional eager to contribute to team success through hard work, attention to detail and excellent organizational skills. I have a clear understanding of energy management and project management and training in creativity and problem-solving skills. Motivated to learn, grow and excel in Energy industry.

### **Career Objective**

To come up with new and noble ways of optimizing and improving energy efficiency by devising interesting energy options for commercial and domestic solutions as well as keeping abreast with new developments and trends around the world through research.

To be part of active and creative team that plays a dynamic role in the achievement of the organization objectives.

## **Skills and competencies**

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| <ul style="list-style-type: none"><li>- Energy management, program development</li><li>- Engineering Design Development</li><li>- Renewable energy technology</li><li>- Solar photovoltaic</li><li>- Solar thermal</li><li>- Wind Energy Technology</li><li>- Energy auditing</li><li>- Energy conservation</li><li>- Knowledge of HVAC and lighting systems</li><li>- Carbon management</li><li>- Knowledge of energy consumption issues</li><li>- Ability to translate technical specifications</li><li>- Knowledge of waste heat recovery</li><li>- Mechanical systems design/implementation</li><li>- Process piping</li></ul> | <ul style="list-style-type: none"><li>- Microsoft Office Suite</li><li>- Autodesk AutoCAD software</li><li>- 3D Modelling</li><li>- MATLAB</li><li>- HOMER</li><li>- AURORA SOLAR</li><li>- PVSyst</li><li>- SPSS</li><li>- Data management</li><li>- Refrigeration and air conditioning</li><li>- Thermodynamics</li><li>- Project management</li><li>- Research and technical analysis</li><li>- Motivating learners through interactive teaching</li><li>- Creative problem solving through critical thinking</li><li>- Flexible and accommodating to new ideas</li><li>- Ambitious and self-motivated</li></ul> |
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## **Education**

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### **Kenyatta university - 2021**

- PhD in Energy Technology – Ongoing

### **Jomo Kenyatta university of Agriculture and Technology - 2018**

- Double degree in Agricultural Engineering - Second Class Upper Division

### **University of Nairobi, 2015**

- Master of Science Degree in Energy Management

### **Kenya institute of management Kim, 2012**

- Post Graduate Diploma in Project Management - Upper Credit

### **Jomo Kenyatta university of Agriculture and Technology - 2009**

- Graduate Engineer in BSc. Biomechanical and Processing Engineering- Second Class Upper Division

## **Trainings**

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### **Gansu Natural Energy Research Institute (GNERI) in China- 2021**

- International Training Workshop on Solar and Wind Energy Application

### **Eenovators Limited-2020-2021**

- World Energy Day Conference 2020
- Emerging Considerations for Africa's Energy and Climate Change Agenda –Unlocking the Balance

### **Kenyatta University- 2020-2021**

- Train the Trainer on Innovation and Entrepreneurship training
- Seminar for Researchers on Research Grants Administration
- Training of New Staff on Gender and Sexual & Gender Based Violence Policies
- Module writing uploading and online facilitation

### **Energy Regulators Association of East Africa (EREA)-2020**

- Energy leadership webinar- shaping the future of East Africa

### **Strathmore University- 2017**

- T3 Grid Tie and Hybrid Training

### **Jomo Kenyatta university of Agriculture and Technology- 2016**

- Solar Photovoltaic Technician Training

### **Strathmore University- 2016**

- Solar Photovoltaic Technician Training

## **Professional Experience**

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### **1. Tutorial Fellow (Kenyatta University- School of Engineering and Technology Department of Energy Technology) May 2020 to Present**

#### **Responsibilities**

- Carry out research in the fields of Energy Technology.
- Contribute to the development and preparation of the school development plan.
- Created modules, study guides and enrichment materials to boost student knowledge.
- Teaching and assisting students in such areas as thermodynamics, energy management and innovative design, creating tailored lesson plans and study guides on subject matter.

- Carrying out assessment, monitoring and evaluation of examinations work.
- Providing an academic and consultative support to students in their learning activities.
- Providing academic input on existing and new courses and course development.
- Second year Class Advisor
- Chairperson of the Undergraduate Committee
- Committee member of Library and module, TVET and Research committees.

**2. Tutorial Fellow (Kisii University- School of Engineering and Innovative Technology)**

July 2018 to April 2020

**3. Teaching Assistant (Kisii University- School of Engineering and Innovative Technology)**

August 2013 to June 2018

**Responsibilities**

- Carry out research in the fields of Agricultural Engineering and Energy.
- Contribute to the development and preparation of the school development plan.
- Teaching as assigned.
- Carrying out assessment, monitoring and evaluation of examinations work.
- Providing an academic and consultative support to students in their learning activities.
- Providing academic input on existing and new courses and course development.
- ISO Secretary at the school

**4. Part time Lecturer**

August 2012 to August 2013: **Kisii University.**

January 2015 to Present: **Rongo University.**

January 2017 to December 2017: **Jomo Kenyatta university of Agriculture and Technology**

**Responsibilities**

Teaching diploma and degree students in Agricultural Sciences in the following areas:

- Tractor Servicing, Maintenance and Operation.
- Introduction to Farm Machinery.
- Farm Structures.
- Farm Power and Machinery.
- Projects, seminars and tutorials.
- Agricultural Processing.
- Post-harvest Technology.
- Planning and coordinating class activities.

**4. Project Coordinator**

September 2011 to August 2012

**Nature Craft Enterprises**

**Responsibilities**

- Coordinating together with the project manager, the project team members, clients and vendors in provisioning, environment setup, fabrication, erection and commissioning of the steel works
- Analysis and monitoring the project reports to highlight issues in the documentation
- Projects, planning and scheduling of activities using Gantt charts and other standard methods to improve progress monitoring

- Supervision of personnel, materials, work progress and equipment for various projects
- Making of quotations and checking of shop drawings
- Worked under the supervision and guidance of the project manager on the project strategies.
- Performed on-site field surveys and wrote technical narratives to document processes and design changes.

## **5. Technical Sales Engineer**

January 2010 to August 2011.

**Cimbria East Africa Ltd.**

### **Responsibilities;**

- Installation and servicing of grain handling equipment
- Production of workshop drawings
- Design and delivery of processing plants and drawings for various clients.
- Co-coordinating technical and sales groups
- Estimation and ordering of plant items and equipment.
- Used effective data analysis and sales strategies to increase win prospect buy-in and demonstrate system benefits.
- Provided technical troubleshooting and problem solving for clients with installed equipment or system issues.
- Reviewed all customer inquiries to understand project scope while managing internal delivery mechanisms.
- Delivered technical sales presentations to prospects and presented benefits and value of products.

## **6. Supervisor**

August 2009 to September 2009

**Kenya National Bureau of Statistics (Census)**

### **Responsibilities:**

- Training of enumerator
- Supervising of enumerators
- Editing
- Managing of public resources

## **Accomplishments**

### **Research and Publication Work**

Ngunzi V.K (2015), Analysis of Energy Cost Savings by Substituting Heavy Fuel Oil with Alternative Fuel for a Pozzolana Dryer Case Study of Bamburi Cement, *American Journal of Energy Engineering*. Vol. 3, No. 6, 2015, pp. 93-102. doi: 10.11648/j.ajee.20150306.13

Ngunzi V.K et.al (2014), 'Simulation Model for Predicting Drying in the Automated Grain Dryer' International Journal of Engineering & Science Research IJESR/March 2014/ Vol-4/Issue-3/193-201 e-ISSN 2277-2685, p-ISSN 2320-9763.

Presented a conference paper on Simulation Model for Predicting Drying in the Automated Grain Dryer at the 8th JKUAT Scientific and Technological Conference 2013.

Part of a project team carrying out a research in Biogas Resource Assessment, Purification and Packaging for Commercial Household cooking” funded by Ministry of Higher Education Science and Technology National Council for Science and Technology

Part of a project team that developed a solar water heating training manual for the Kenyan Industry funded by the UNDP (Low carbon emission project)

Part of a project team that implemented a project on sustainable energy for Agriculture sponsored by the GIZ

Part of the team that developed the curriculum for Bachelor’s Degree in Electrical and Telecommunication Engineering for Kisii University

Part of the committee implementing the equipment for engineering laboratory for Kisii University

### **Scholarships**

Gandhi Scholarships - University of Nairobi

### **Project Management:**

Supervised team of six to ensure projects stayed on track and were delivered on budget.

Supervised project implementation efforts to ensure projects were completed to company standards, on schedule and within budget constraints.

### **Supervision**

Supervised and maintained construction sites to ensure effective implementation of projects

Acted as coordinator of the Department of Engineering and Innovative Technology, Kisii University (June to July 2017)

### **AutoCAD Software Utilization**

Produced drawings, maintained, archived and retrieved CAD files and drawing documents for the Completion of seven commercial projects which included; Agroways Uganda Ltd, McNeel Millers Ltd in Thika, Bakex Millers Ltd in Thika, Mt Meru Millers in Zambia, Sigma Feeds TwarabOlesirkon, Master mind Tobacco Ltd and Mt Meru Millers Singida in Tanzania

### **Detail Drafting**

Created detailed shop fabrication drawings for projects involving civil works for assembly and installation.

### **Installations**

Successfully installed a coffee processing plant in Louis Dreyfus Commodities (K) in Nairobi.

Successfully designed an excellent insulation/energy saving system for a cotton fiber laboratory

## **Sports**

Participated in the 6<sup>th</sup> East African Inter-University Games held between 3<sup>rd</sup> and 8th February, 2009, in Kampala, Uganda.

Participated in the Barclays JKUAT Sports Day held on 24th-26th October, 2008 at JKUAT.

## **Community service**

St. John Ambulance-First Aid Service

Librarian – JKUAT Catholic Community and Pro-Life JKUAT Association from 2004-2007:

## **Affiliation**

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Graduate Engineer at Engineers Board of Kenya

## **Hobbies**

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Reading

Watching discovery documentaries

Athletics

Singing

## **Referees**

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1. Dr. Francis Njoka  
Chairman- Department Energy Technology,  
Kenyatta University,  
P.O Box: 43844-00100  
Nairobi.  
Tel: +254-726-811-416
  2. Dr. Eng. Gareth M. Kituu, REng, MIEK  
Dean - School of Biosystems and Environmental Engineering (SoBEE).  
Jomo Kenyatta University of Agriculture and Technology,  
P. O Box 62000-00200,  
Nairobi.  
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  3. Dr. J.M. Kilika  
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Kenyatta University  
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