#### **CURRICULUM VITAE**

NAMES: Joel Kipruto Chirchir

NATIONALITY: Kenyan

PLACE OF BIRTH: Uasin Gishu, Kenya

DATE OF BIRTH: 24.07.1956

MARRITAL STATUS: Married

RESIDENTIAL ADDRESS: Eldoret. P.O. Box 7260

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# **EDUCATION:**

YEAR LEVEL INSTITUTION

1972 PRIMARY SCHOOL CHEPKOILEL PRIMARY,

UASIN GISHU, KENYA

1975 SECONDARY SCHOOL RIFT VALLEY TECHNICAL SCHOOL

UASIN GISHU , KENYA

1979 COLLEGE DIPLOMA KENYA SCIENCE TEACHERS'COLLEGE

NAIROBI, KENYA

1986 MSc. MECHANICAL RUSSIAN FRIENDSHIP UNIVERSITY (RFU)

ENGINEERING MOSCOW, RUSSIA.

1993 PhD. MECHANICAL RUSSIAN FRIENDSHIP UNIVERSITY

ENGINEERING MOSCOW, RUSSIA

## CURRENT OBLIGATIONS and RESPONSIBILITIES

- Lecturer at Masinde Muliro University of Science and Technology, Kakamega, Kenya
- Coordinator of Mechanical and Industrial Engineering (MIE) Projects for Bachelor Degree at Masinde Muliro University of Science and Technology.

- Faculty Chairman and representative for Postgraduate Programs at the School of Graduate Studies, Civil, Electrical and Energy Studies, and Mechanical and Industrial Engineering, MMUST.
- Teaching both the undergraduate and the Postgraduate Programs.

#### • BACKGROUND EXPERIENCE:

- 1979 -1980 Teacher , Lenana Secondary High School
- 1986 Finished university and defended Thesis to acquire Master of Science degree (MSc) in Mechanical Engineering from The Russian Friendship University (RFU), Moscow
- 1987- 1990 Lecturer at The United Nations International Development Organization.
- 1987 1990 Commencement of Ph. D research work at RFU, Moscow. Robot and Mechanization Lab Assistant. Lecturer at The UNIDO on Material Processing, Machining and Machine tools International Course for Eastern European, Asian, Latin American and African Developing countries. Industrial Practice in The All Russia Car Manufacturing Plant, ZIL, Moscow.
- 1991 1993 Tutorial Fellow at The Department of Automation and Robotics, The Friendship University, Moscow.

#### Postgraduate Research Course Work

Part-Time in Technical Salesmanship, EXA Parispa Co. Ltd., Moscow

- 1989 1993

  Assistant Lecturer in The Department of Metrology and in The Department of Fluids and Hydraulic systems, The Friendship University, and Scientific Research and publications1993119911Defence DDdd.
- 1993 Finished Post graduate scientific research and successful Presentation and Defended dissertation to attain PhD degree in Mechanical Engineering at RFU , Moscow.
- 1993 1995 Supervisor Shift Manager Chief Mechanical Engineer for The Cadbury and Schweppes, Confectionery , Low Alcohol Content Drink; and Beverage Plant, Moscow.

Responsibilities: Setting up of the plant from layout plan, warehousing systems, Production machinery layout, Infrastructure (roads, sewage, water treatment), Design of production processes, shift scheduling and management, Production Line Efficiency and Resource loss tracking, Logistics. Answerable to London based Managing Director.

**1996 - 1999** Plant manager.

Responsibilities: In full charge of W/H management, Production Planning and Supply Chain, Quality Control management, Personnel Training. Innovations, gains and losses. Public

Relations and security accountability. Answerable to London based Board of Directors . Training officer for Bottle filling and Bottle blowing production personnel.

- 1999 2002 Logistics General manager for the Algro Holdings, Moscow.

  \*Responsibilities:\* In charge of International Chain-Supply of domestic chemicals and food. Value adding production and customization of goods inventoried. Distribution of orders all over Russia by truck, rail, ship and van. Transport routing and driver scheduling within Holland, Germany, Ukraine, England and Russia.
- 2002 2006

  General Manager, The Royal Perfumes, Moscow.

  Responsibilities: The Site layout and building of the plant.

  Setting up and staffing of QC lab, perfume preparation, chain supply and warehousing. In charge of production management, CAPEX reviewing, engineering staff, training of supervisors and setting up of 4 shifts. Liaison with partners on matters of outsourcing and subcontracting. Acquisition of Licenses to produce new products and their certificates of conformity. General control over the handling of Hazardous Butane- Propane gas and Alcohol.
- 2007 Member of team of experts for drawing the newly proposed curriculum for the Mechanical and Industrial Engineering (MIE) Courses, MMUST.
- 2008 2014 Part Time lecturer and supervisor at Moi University , school of mechanical engineering, Energy Studies.
- 2007 2013 Part-Time lecturer at the Mechanical Technology Department for both Post-Graduate and Undergraduate Programs, MOI UNIVERSITY.
- 2008 2012 Project Supervisor and a member of examination panel assessing the Undergraduate Program. Active participator during final Project Defenses, MOI UNIVERSITY.
- 2008 2014 Internal examiner for Post Graduate research works.

  Teaching both Undergraduates and Post Graduate students,

  MMUST.
- 2014 Committee member for Curriculum Review of Programs of Engineering Sciences.

### **PUBLICATIONS and INVENTIONS:**

- 1985 A study and a Mathematical Wear Model and Analysis of a Horizontal Head Milling tool due to vibration excitement of actual cutting. Publication.
- **1986** Two-Spindle numerically controlled machine for grinding involute profile spline-shafts. Invention Design. MSc Thesis.
- 1990 The Correlation of Surface Roughness and Vibration Functions of Machine Tool Component Parts. (Publication).

- 1993 The Influence of Machine Tool Cutting Tool Jig and Fixture Work piece Dynamic Characteristics on the Parameters of Tool Wear and Surface Roughness. Ph.D Dissertation.
- **1995** An New Method of Conducting Efficient Backwash of totally clogged Water Treatment Plant. (Invention implemented).
- **1996** A pneumatic selector of defect performs during bottle blowing on the B40 and B80 PET bottle blowing machines. (Design & Construction).
- **1997** A zero risk automated method of hopper loading above 2.5 tons perform box in a congested production area. (Design & Construction).
- 1998 A new method of reorientation of bottle caps in hopper of the Aluminum Company of America "ALCOA" capping machine. (Design and Construction).
- 2003 A Non Volatile alcohol Stirring and dozing Machine for perfume manufacture. Design & Construction implemented.
- 2005 Automated perfume bottle filling machine. For bottle sizes 30ml, 50ml, 75ml and 100ml. Project commissioned and implemented project.
- **2010** The Application of Simulation Modeling for Energy Saving in the Optimization of Pumping Piping System for a Dairy Processing Plant: A Case Study of KCC , Eldoret, Kenya. (methods under implementation).
- 2011 The Environmental Impact and the Effective treatment of Effluent Waste Water at The Flourspar Mining Company at Kimwarer, Keiyo Central County, Kenya. (under Publication by JSTEM, MMUST.

# Conferences and Courses:

- Presented a Mathematical Modeling Simulations research paper on Energy Saving through "The Simulation and the Redesign of The Pumping - Piping System of Milk Processing System of KCC Plants, Eldoret, and Nyahururu", at The 4<sup>th</sup> National Council for Science and Technology (NCST), Annual Conference on dissemination of research results and Exhibition of Innovations held at KICC, Nairobi from 3rd - 6<sup>th</sup> May, 2011 (Innovation recognized).
- Special Course in Energy Audit and Management held at Sankara Hotel, Westlands, Nairobi, organized by Kenya Association of Manufacturers (KAM).
- Special Course in Energy Audit and Management held at Royal Court Hotel, Mombasa, organized by Kenya Association of Manufacturers (KAM).
- Certified Manager's Course (CEM), organized and conducted on behalf of KAM (Kenya) by SEM (South Africa) held on 09 21 July 2012, at Panafric Hotel, Kilimani, Nairobi. Final CEM Examination done.

### Special Remarks:

- Introduced and implemented a new unified format for Thesis compilation and also one for undergraduate write-up procedure.
- Appointed by the Senate to review, redesign and introduce a unified report writing format to be adopted for theses and dissertation write-up in MMUST.
- Appointed by MMUST Senate to the adhoc committee for working out ways and means of raising the standard of theses and dissertation writing.
- Engineering Faculty chairman representative of MMUST School of Graduate Studies.
- Teaching Undergraduates and also Postgraduate students. Been taking them through course work.
- Supervisor for PhD students.
- Affiliations:

Corporate member to Institute of Engineers of Kenya (IEK) M4157

Awarded Engineer's License to Practice by Engineers Bureau of Kenya (EBK) A3738

## Referees:

- 1. Eng.Prof.Abel Nyakundi Mayaka, Dean of Engineering Faculty, Multimedia University, 15653-00503, Nairobi, Kenya. Phone +254723082890
- 2. Prof.Vladimir Kopylov, Russian Friendship University, Department of Automation, Mechanical Engineering, Machine Building Technology, Moscow, Russia; Tel. +79165757002; 84957562110.
- 3. Prof. Joel Kiplagat Kibii, Head of Civil Engineering Dept, Moi University, P.O. BOX 3900-30100, Eldoret, Kenya. Tel: 0721751829
- 4. Dr. K'Owino O., C.O.D Chemistry Dept., Masinde Muliro University of Science and Technology, P.O. BOX 190-50100, Kakamega, Kenya. Tel: 0710691771