**Prof. Eng. Jean Bosco BYIRINGIRO (PhD, Reg.Eng)**



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**Languages**

English- **Fluent** French- **Fluent** Swahili-**Fluent**

Kinyarwanda: **Native speaker**

**Referees**

* Prof. Eng. Alex M. Muumbo (PhD)

Executive Dean, Technical University of Kenya. Email: [amuumbo@tukenya.ac.ke](mailto:amuumbo@tukenya.ac.ke)

* Dr. Langat Kipkrui (PhD)

Director General, TVETA-Kenya

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* Prof. Fredrick K. Waweru (PhD)

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**SUMMARY**

**Prof. Jean Bosco Byiringiro** is a Professor of Mechatronics Engineering, Founding Director of the Africa Virtual Mechatronics lab and Siemens Mechatronics Certification Centre at Dedan Kimathi University of Technology, Kenya. Founder Expert, Alliance for Industry 4.0 and Smart Manufacturing in Africa (AISMA) with United Nations Industrial Development Organization (UNIDO). **Prof. Byiringiro** is a visiting Professor at University Bourgogne Franche-Comté (UBFC)-France, the National Engineering School of Tarbes-National Polytechnic Institute of Toulouse (ENIT-INPT), France. He is a reviewer of IEEE, Elsevier, Springer, Acta Press, Sage, Wiley, and Taylor & Francis Publishers. **Prof. Byiringiro** is also Registered Professional Engineers by Engineers Board of Kenya (EBK), Mechatronics Systems Professional by Siemens AG. Germany, and Representative of African Organization for Standardization (ARSO) in Africa Steering Committee of Industrie 4.0 and lead the discussion under the 4th Industry revolution (4IR) strategies.

**Research Funds 2023/2024**- (USD-1 million)- SIFA AUDA-NEPAD, EU-TAF, AU-AFCTA,

NRF, EUREKA, Campus France, Expertise France, Erasmus-MIC, UNIDO, CMU-Master Card, WorldSkills

**INTERNATIONAL AWARD:** Knight/ Chevalier – Ordre des Palmes Academiques by French Government

**EDUCATION**

 **2012:** PhD-Mechanical Engineering, Specialization: Micro/Nano Fabrication

–Yeungnam University, South Korea

 **2009:** MSc- Mechatronic Engineering- Jomo Kenya University of Agriculture and Technology, Kenya

 **2005:** BSc. Electro-Mechanical Engineering, College of Science and

Technology, University of Rwanda.

**EXPERIENCE**

 **2018 to Date:** Director, Siemens Mechatronics Certification Centre at

Dedan Kimathi University of Technology, Kenya

 **2015-2016:** Dean, School of Engineering at Dedan Kimathi University of

Technology, Kenya

 **2013-2019:** Chairman, Mechatronic Engineering Department at Dedan

Kimathi University of Technology, Kenya

**RESEARCH INTEREST**

 **Industry 4.0 Technologies:** Virtual Reality, Augmented Reality, Digital Twin, Digital Triplet, Internet of Things, Artificial Intelligent, Data Mining, Learning factory, etc.

 **MEMS/NEMS:** Development of an Economic Fabrication Technique of a 3D Rapid Micro/Nano-Mask.

 **Micro-Machining:** Development of Base and Core Technologies for

Nano/Micro-Based Ultra Precision Hybrid Machining Systems.

**RECENT INDUSTRY 4.0 PUBLICATIONS**

* Rono, K., **Byiringiro, J.B**., Mharakurwa, E.T. et al. Process Modelling of an Analytic Control Machine in Virtual Reality Platform. Int. J. Precis. Eng. Manuf. 24, 787–796 (2023). <https://doi.org/10.1007/s12541-023-00778->
* Gichane, Michael M.; **Byiringiro, Jean Bosco**; Chesang, Andrew K., Digital Triplet Approach for Real-Time Monitoring and Control of an Elevator Security System, Designs 2020, 4, 9; <https://doi.org/10.3390/designs4020009>
* Nahashon O. Osinde, **Jean B. Byiringiro**, Michael M. Gichane, and Hasan Smajic, Process Modelling of Geothermal Drilling System Using Digital Twin for Real-Time Monitoring and Control, Designs 2019, 3, 45; <https://doi.org/10.3390/designs3030045>