

# Brief Biography of Etienne Ntagwirumugara

Dr. Eng. Etienne Ntagwirumugara is the CEO of Rwanda Education and Research Network (RwEdNET). He was Deputy Director of all Engineering Laboratories and Workshops in Kigali Institute of Science and Technology (KIST), Dean Faculty of engineering, Director of Centre for Innovations and Technology Transfer (CITT), Senior Lecturer and Head of Electrical, Electronics and Telecommunications Department. He also holds the post of Research Scientist at the University of Valenciennes, France from 2003.

Apart from Academics he also worked as a Chief Administrator of Networking and Planning in Rwandatel s.a, Telecommunication Company, Kigali, during 1996 to 1999.

Dr. Eng Ntagwirumugara Etienne is a member of the institution of Engineers in Rwanda, Patron of association of Engineers in Electronics and Telecommunication in Rwanda, Member of Rwanda Science and Research Council. In October 2007, Dr. Eng. Ntagwirumugara Etienne was appointed as internal examiner of Projects for Master's in Communication Management in partnership with Coventry University, UK and member of the Internal Tender Committee in KIST. He was a Board member of Center for support to Small and Medium Enterprises in Rwanda (CAPMER). From April 2009, he was appointed by Government of Rwanda as Board member of the Workforce Development Authority (WDA).

He has attended several higher training in ICT (Sapporo Electronics Center, Japan in 2001), management training courses in Coventry University, UK and Germany research centers (Kassel & Vismar Universities) in 2005. He continues to lecture, consult and do research in Complementary Metal Oxide Silicon (CMOS) implementation of Low Noise, high linearity wireless communication receivers, the acoustic – optoelectronic integrated circuits, and surface acoustic wave filters for Global system for mobile communication (GSM) and Global Positioning system (GPS), Optical measurement of ultra high frequency and in the field of Renewable energy.

**LANGUAGES:** Kinyarwanda (native), Swahili, English & French (Fluent)

## AFFILIATIONS

- ✓ From April 2009, Board Member of the Workforce Development Authority (WDA),
- ✓ From January 2008, Board Member of Centre for support to Small and Medium Enterprises in Rwanda (CAPMER),
- ✓ Member of Rwanda National Electrotechnical Committee (RNEC) under RBS (Rwanda Bureau of Standards,
- ✓ From 2007 to 2009, Member of the Tender Committee in KIST,
- ✓ Internal Examiner for Master's in Communication Management, Project in Partnership with Coventry University, UK.
- ✓ Member of Rwanda Science and Research Council,
- ✓ Member of Rwanda Association of Engineers,
- ✓ Member and Patron of Association Engineers in Electronics and Telecommunication in Rwanda,
- ✓ Member of KIST Strategic Plan 2009-2014,
- ✓ Member of implementation KIST Prospectus,

- ✓ Member of implementation KIST-IBM ICT Partnership on setting up an ICT centre of Excellence in Rwanda,
- ✓ Member of committee of E-Health Centre of Excellence in KIST.

## EDUCATION

Ph'D. In Electronics/Telecommunication," The University of Valenciennes and Hainaut Cambrésis, France" (2003-2007)

M.S. University of Science and Techniques of Languedoc-Montpellier II, France (1999-2000)

B.S.Eng. National University of Burundi, Bujumbura-Burundi (1991-1996)

## EMPLOYMENT

### Academic Employment Record

- ✓ From April 2010 up today, Deputy Director in Charge of Engineering Laboratories
- ✓ From April 2009 up April 2010, Acting Dean of Faculty of Engineering,
- ✓ 2007 – 2008, Head of Department in Electrical and Electronics Engineering,
- ✓ 2007 up today, Senior Lecturer in Electrical and Electronics Engineering Department ,
- ✓ 2001 – 2007, Lecturer in Electrical, Electronics and Telecommunications Department,

### Non-Academic Employment Record

- ✓ From March 2010 up today, Coordinator of Rwanda Education and Research Network (RwEdNet), Project under Minister of Education and High Learning Institutions in Rwanda.
- ✓ 2008 - 2009, Director of Centre for Innovation and Technology Transfer (CITT),
- ✓ 1996 – 1999, Chief Administrator Network and Planning at Rwandatel s.a, Telecommunication company, Kigali, Rwanda.

## PUBLICATIONS

### **Analysis of Frequency Response of IDT/ZnO/Si SAW Filter Using the Coupling of Modes Model**

Ntagwirumugara, E.; Gryba, T.; Zhang, V.Y.; Dogheche, E.; Lefebvre, J.-E.;

[Ultrasonics, Ferroelectrics and Frequency Control, IEEE Transactions on](#)

Volume 54, [Issue 10](#), October **2007** Page(s):2011 - 2015

Digital Object Identifier 10.1109/TUFFC.2007.495

[AbstractPlus](#) | Full Text: [PDF](#)(480 KB) **IEEE JNL**

[Rights and Permissions](#)

### **Extension of the Legendre polynomial approach for analyzing composite BAW resonators**

Raherison, A.; Ratolojanahary, F.E.; Lefebvre, J.E.; Gryba, T.; Ntagwirumugara, E.;

[Frequency Control Symposium, 2007 Joint with the 21st European Frequency and Time Forum. IEEE International](#)

May 29 2007-June 1 **2007** Page(s):216 - 219

Digital Object Identifier 10.1109/FREQ.2007.4319066

[AbstractPlus](#) | Full Text: [PDF](#)(561 KB) **IEEE CNF**

[Rights and Permissions](#)

### **Fabrication of 945 MHz Band Film Surface Acoustic Wave Resonators Using ZnO Thin Film with Si Substrate**

Ntagwirumugara, E.; Gryba, T.; Zhang, V.; Carlier, J.; Lefebvre, J.E.;

[Frequency Control Symposium, 2007 Joint with the 21st European Frequency and Time Forum. IEEE International](#)

May 29 2007-June 1 2007 Page(s):176 - 180  
Digital Object Identifier 10.1109/FREQ.2007.4319058  
[AbstractPlus](#) | Full Text: [PDF](#)(472 KB) **IEEE CNF**  
[Rights and Permissions](#)

**Design of Al/ZnO/Si one-port SAW resonator filter**

Ntagwirumugara, E.; Gryba, T.; Etienne Lefebvre, J.;  
[Signal Processing and Its Applications, 2005. Proceedings of the Eighth International Symposium on](#)  
Volume 1, August 28-31, 2005 Page(s):167 – 170  
[AbstractPlus](#) | Full Text: [PDF](#)(156 KB) **IEEE CNF**  
[Rights and Permissions](#)

E.Ntagwirumugara and all, "**Design of dispersive layered SAW filters with CMOS low noise amplifier**", Journal of Acoustic Society for America (Harvard-NASA); 2008 May; 123 (5):364918531648 (P, S, E, B). The Journal of the Acoustical Society of America, vol. 123, issue 5, p. 3649. <http://adsabs.harvard.edu/abs/2008ASAJ..123.3649G>

**SOUTH-SOUTH COOPERATION FOR TECHNOLOGY TRANSFER AND DEVELOPMENT OF SMALL AND MEDIUM ENTERPRISES (SMEs)**

18-22 August, 2008 Browns Beach Hotel, Negombo, Srilanka 2008  
Technology Transfer and Development of SME's in the Rwandan Community.  
*Dr. Eng. Ntagwirumugara Etienne, Director, Centre for Innovations and Technology Transfer, Kigali Institute of Science and Technology, Rwanda.*  
**Over 20 papers.**