

Curriculum Vitae

Personal information

First name / Surname **Samson RWAWIIRE**
Address Busitema University, Department of Textile & Ginning Engineering
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E-mail(s) rbsjunior@gmail.com
Nationality UGANDAN
Place and Date of birth Mulago – Kampala (Uganda) on 30th January 1982
Religion Seventh-Day Adventist
Status and Gender Married; Male
Wife – One: Etro Lisa Mirembe
Kids – One: Elioenai Sharai Rwahwire



Desired Appointment

Work experience

Dates	1/2015 to-date
Occupation or position held	SENIOR LECTURER , Busitema University, Department of Textile & Ginning Engineering (UGANDA)
Dates	10/2011 to 12/2014
Occupation or position held	LECTURER , Busitema University, Department of Textile & Ginning Engineering (UGANDA)
Dates	06/2010 to 10/2011
Occupation or position held	ASSISTANT LECTURER , Busitema University, Department of Textile & Ginning Engineering (UGANDA)
Dates	09/2010 to present
Occupation or position held	Ag. HEAD, DEPARTMENT OF TEXTILE&GINNING ENGINEERING
Dates	24th Nov to 3rd Dec. 2010; 28th Jan to 4th Feb 2011; 10th Mar to 24th Mar 2011
Occupation or position held	Ag. DEAN, FACULTY OF ENGINEERING
Name and address of employer	Busitema University, P.O Box 236,Tororo, Uganda – East Africa
Dates	11/2009 to 06/2010
Occupation or position held	AIRCRAFT ENGINEER – TRAINEE
Name and address of employer	Eagle Air Ltd., 11 Portal Avenue, P.O Box 7392, Kampala – Uganda
Dates	8/2008 to 11/2009
Occupation or position held	RESEARCH ASSISTANT
Name and address of employer	Czech Technical University in Prague, Department of Strength and Elasticity of Materials
Dates	30/06/2007 - 30/09/2007
Occupation or position held	COMPOSITE LAMINATOR
Name and address of employer	LA Composite s.r.o., Beranových 65, Prague 9, 199 02, Czech Republic
Type of business or sector	Development and production of composite and sandwich structures
Dates	07/2002 - 10/2002
Occupation or position held	LABORATORY ASSISTANT
Type of business or sector	Government Chemist and Analytical Laboratory- Uganda Ministry of Internal Affairs

Education and training	
Dates	10/2012 – 06/2016
Title/ Qualification	Ph.D. (Material Engineering)
Name and type of organisation	Technical University of Liberec, (TU Liberec) Faculty of Textile Engineering Department of Material Engineering
Research field/ Thesis topic	<i>Mechanical and Thermo-acoustic Characterization of Barkcloth and Its Polymer Reinforced Composites</i>
Dates	09/2003 - 08/2008
Title of qualification awarded	MASTER'S IN MECHANICAL ENGINEERING (BSc. and MSc. combined)
Principal subjects / occupational skills covered	Mechanical and Aerospace Engineering
Research field/ Thesis topic	<i>Structural Analysis of Composite Elements using the Finite Element Method</i>
Name and type of organisation providing education and training	Czech Technical University, (CTU Prague) Faculty of Mechanical Engineering Department of Aerospace Engineering
Dates	10/ 2002 – 05/2003 Charles University, Institute for Language and preparatory Studies, Podebrady
Dates	2000 Uganda Advanced Certificate of Education, Kololo SS
Dates	1998 Uganda Certificate of Education, City High School
Dates	1994 Primary School Leaving Certificate, Mbuya C/U Primary School
PROFESSIONAL CERTIFICATES	<ol style="list-style-type: none"> Introduction to Forensic Science – Nanyang Technological University, Singapore Smart Textiles – University of Ghent, Belgium Civil Aviation Products under the requirements of European Aviation Safety Agency, EASA Part 21 – Brno University of Technology, Czech Republic Design, Analysis and Mechanics Of Composite Structures – Czech Technical University, Czech Republic
OTHER DUTIES	<ol style="list-style-type: none"> Member of Faculty Board Chair, Faculty Research and Publications Committee Chair, Department of Textile and Ginning Engineering Board
Computer skills and competences	Good command of Microsoft Office (Word, Excel, Power point, Project) Finite Element Stress Analysis software (ABAQUS). Computational Fluid Dynamics software (Fluent-Basic level) Scripting language (Basic C++, Matlab- basic, html). Computer hardware. Networking and System Administration. Basic knowledge of graphic design, audio and movie applications (Adobe Photoshop, Movie Maker, Sony Sound Forge, Adobe after effects, Sony Vegas Pro). 2D movie animations (Adobe Flash CS4)
AWARDS & ACHIEVEMENTS	<ol style="list-style-type: none"> Uganda-Czech governments Scholarship Deans Merit Scholarship for excellent results in 5th year of studies First Prize Poster Award at 2008 PEGASUS-AIAA Student Conference AAU Small Grants for Theses and Dissertations
FUNDED PROJECTS	<ol style="list-style-type: none"> Banana Fibre – Development of a novel sustainable concept to utilization of banana pseudo-stem for textile fibre. 2013-2015 – National Council for Higher

PUBLICATIONS

JOURNALS

1. **Rwawiire, S.**, Tomkova, B., Militky, J., Jabbar, A., & Kale, B. M. (2016). Short-Term Creep of Barkcloth Reinforced Epoxy Laminar Composites. (*To Be Submitted to Composite Part B*)
2. **Rwawiire, S.**, Tomkova, B., Militky, J., Hes, L. (2016). Modeling of the Thermo-acoustic Properties of Cellulose Nonwoven Natural Fabric (Barkcloth) (*To Be Submitted to Advances in Material Science and Engineering*)
3. **Rwawiire, S.**, Tomkova, B., Militky, J., Jabbar, A., & Kale, B. M. (2016). Preparation and Characterization of Epoxy Polymer Composites Reinforced with Enzyme and Plasma Treated Natural Cellulose Fabric (*Under Review Polymer Bulletin*)
4. **Rwawiire, S.**, Tomkova, B., Militky, J., Hes, L., Kale, B. M. (2016). Empirical Modeling of Sound Absorption Properties of Natural Nonwoven Fabric (Antiaris toxicaria Barkcloth), (*Accepted Materials Science Forum (ISSN:1662-9752)*)
5. Kale, B.M., Wiener, **Rwawiire, S.**, Militky, J. (2016).Development of Photocatalytic Self-cleaning Cotton Fabric, (*Accepted Materials Science Forum (ISSN:1662-9752)*)
6. Kale, B.M., Wiener, J., Militky, J., **Rwawiire, S.**, Mishra, R., Karl, I. J., Youjiang, W. (2016). Coating of Cellulose-TiO₂ nanoparticles on cotton fabric for durable Photocatalytic self-cleaning and stiffness (*Under Review Carbohydrate Polymers*)
7. **Rwawiire, S.**, & Tomkova, B. (2016). Static and Dynamic mechanical properties of barkcloth (*Ficus natalensis*) reinforced epoxy composite. *Journal of Natural fibers*, 13 (2),137 - 145
8. Jabbar, A., Militky, J., Kale, B. M., **Rwawiire, S.**, Nawab, Y., & Baheti, V. (2016). Modeling and analysis of the creep behavior of jute/green epoxy composites incorporated with chemically treated pulverized nano/micro jute fibers. *Industrial Crops and Products*, 84, 230-240.
9. Jabbar, A., Militky, J., Wiener, J., Usman, M., **Rwawiire S.** (2016). Tensile, Surface and Thermal Characterization of Jute Fibers after Novel Treatments – *In Press Indian Journal of Fiber and Textile Research*.
10. Kale, BM., Wiener, J., Militky, J., **Rwawiire, S.**, Mishra, R., Jabbar, A. (2015). Dyeing and stiffness characteristics of cellulose-coated cotton fabric. *Cellulose*, 23, 981-992.
11. **Rwawiire, S.**, Tomkova, B., Militky, J., Jabbar, A., & Kale, B. M. (2015). Development of a biocomposite based on green epoxy polymer and natural cellulose fabric (bark cloth) for automotive instrument panel applications. *Composites Part B: Engineering*, 81, 149-157.
12. **Rwawiire, S.**, Tomkova, B., Militky, J., Gliscinska, E., Krucinska, I., Michalak, M., Jabbar, A. (2015). Acoustic properties of bark cloth and its laminar epoxy composites *Autex Research Journal. ISSN (Online) 2300-0929, DOI: 10.1515/aut-2015-0010, April 2015*
13. **Rwawiire, S.**, & Tomkova, B. (2015). Morphological, Thermal, and Mechanical Characterization of *Sansevieria trifasciata* Fibers. *Journal of Natural Fibers*, 12(3), 201-210.
14. **Rwawiire, S.**, & Tomkova, B. (2015). Thermal, static and dynamic mechanical properties of bark cloth (*Ficus brachypoda*) laminar epoxy composites. *Polymer Composites*, DOI: 10.1002/pc.23576
15. **Rwawiire, S.**, & Tomkova, B. (2014). Thermo-physiological and comfort properties of Ugandan Bark cloth from *Ficus natalensis* *Journal of the Textile Institute*. 105 (6), 648-653
16. **Rwawiire, S.**, Tomkova, B., Militky, J., Bandu, K. (2014). Effect of layering pattern on the static and dynamic mechanical properties of bark cloth (*Ficus natalensis*) laminar epoxy composites. *Journal of Polymer Analysis and Characterization*. 20 (2), 160-171
17. **Rwawiire, S.**, Kasedde, A., Nibikora, I., & Wandera, G. (2014). Prediction of Polyester/Cotton Ring Spun Yarn Unevenness Using Adaptive Neuro Fuzzy Inference System. *Journal of Textile and Apparel, Technology and Management*, 8(4).
18. **Rwawiire, S.**, G. Habbi., J. Okello. (2014). Comparative evaluation of the dynamical mechanical properties of woven *Sansevieria* and Banana fiber laminar epoxy

composites, *Tekstilec 57(4)*, 315-320

19. **Rwawiire, S.**, & Tomkova, B. (2014). Effect of enzyme and plasma treatments of Barkcloth from *Ficus natalensis*: Morphology and thermal behavior- *Accepted in the Journal of the Textile Institute*
20. **Rwawiire, S.**, Luggya, G. W., & Tomkova, B. (2013). Morphology, Thermal, and Mechanical Characterization of Bark Cloth from *Ficus natalensis*. *ISRN Textiles*, 2013.

BOOK CHAPTERS

21. **Rwawiire, S.**, Tomkova, B., Militky, J. (2015). A review of Acoustic Absorption Materials: Sustainable Natural Fibrous Materials, *Recent Developments in Fibrous Material Science*, Volume II, 182-198, ISBN 978-80-87269-45-9.
22. **Rwawiire, S.**, Tomkova, B., Militky, J., Hes, L. Thermo-acoustic Properties and Modeling of Natural Fibrous Layers and Composites, *In Press: Progress in Fibrous Materials Science*

CONFERENCE PROCEEDINGS

23. **Rwawiire, S.**, Tomkova, B., Militky, J., Hes, L., Bandu, M. Empirical Modeling of Sound Absorption Properties of Natural Nonwoven Fabric (*Antiaris toxicaria* Barkcloth). *In: Proceedings of First International Conference on Civil Engineering and Materials Science*, Singapore, 1-3 May 2016
24. **Rwawiire, S.**, & Tomkova, B. (2015). Barkcloth (*Ficus natalensis*) reinforced epoxy composites: Effect of enzyme and plasma treatments on morphology, thermal, static and dynamic mechanical properties. *In: 5th International Conference on Innovative Natural Fibre Composites for Industrial Applications*, Rome, 15-16 October 2015
25. **Rwawiire, S.**, & Tomkova, B. (2014). Comparative evaluation of the dynamic mechanical properties of bark cloth epoxy laminar composites. *In: Proceedings of the Workshop for PhD students of the faculty of textile engineering and faculty of mechanical engineering*, 112-116, ISBN 978-80-7494-100-9, Liberec – Czech Republic
26. **Rwawiire, S.**, & Tomkova, B. (2014). Comparative evaluation of the thermal conductivity of bark cloth epoxy composites. *In: Proceedings of the Fiber Society Conference*, Liberec, 21-23 May 2014
27. **Rwawiire, S.**, Wandera, J. (2012). Natural Fibres: A Blue Print for Ecofriendly Textiles and Biocomposites. *In: Proceedings of XVth International Scientific and Practical Workshop: Physics of Fibrous Materials*, 67-73, ISBN 978-5-88954-374-9, Ivanova - Russia.
28. **Rwawiire, S.**, Akanyijuka, M. (2011). Harnessing the potential of selected plant based fibers for sustainable development through value added products. – *In: Proceedings of Moi University, 7th Annual International Conference*, Eldoret, 2011

CONFERENCE ABSTRACTS

29. **Rwawiire, S.** Namuga, C., Kucel, S.B, Gudoi, D. Processing of Natural Fibre Textile from *Ficus natalensis* and *Antiaris toxicaria*. - *International Symposium on Sustainable Development through Research in Natural Textile Fibres, Textile Products, Trade and Marketing*, 5th – 8th March 2012, Kisumu – Kenya
30. **Rwawiire, S.** Kucel, S.B Buckling and Post-buckling analysis of textile composite panels - *International Symposium on Sustainable Development through Research in Natural Textile Fibres, Textile Products, Trade and Marketing*, 5th – 8th March 2012, Kisumu – Kenya
31. **Rwawiire, S.** Prucha, P. Analysis of adhesively bonded stringer-stiffened panel for assessing the strength of adhesive layer. - *Pegasus-AIAA International Student Conference*, 2008, Prague – Czech Republic (**First Prize Poster**)

INVITED CONFERENCE SPEAKER

1. **Rwawiire, S.** Ginning Sector Training in the East African Community - *1st International East African Cotton, Textile and Apparel Value Chain Conference*, Mombasa – Kenya, 2011

THESES

1. Mechanical and Thermo-acoustic Characterization of Barkcloth and Its Polymer Reinforced Composites, Ph.D Thesis, 2016 – TU Liberec
2. Analysis of Composite Elements using the Finite Element Method, Master's thesis, 2008 – CTU Prague

REFEREES

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