

## University of Rwanda Visit Summary

Colorado State University was pleased to host delegates from the University of Rwanda in September of 2017. The delegates were:

Etienne Ntagwirumugara, Professor in Electrical Engineering, Head of the African Center of Excellence for Energy in Sustainable Development (ACE-ESD)

During this visit, Tom Bradley, V. Chandrasekar, Daniel Zimmerle, Bryan Willson, David McLean and others had the opportunity to discuss implementation of the ideas for collaboration proposed in the International Memorandum of Understanding that was signed by Colorado State University and the University of Rwanda in January of 2017.

1. CSU staff exchange. CSU will identify potential post-doctoral or late-stage PhD students who could be employed by the U. Rwanda for 1 or more semesters to teach CSU course material for modules in the ACEESD program.
  - a. Candidates should have experience with the appropriate courses at CSU to support delivery at UR.
  - b. UR will support CSU researchers participating in research while at UR. This *may* include participating in PhD supervision.
  - c. Develop a mechanism to identify specific CSU faculty who will support (1) and could be listed on U. Rwanda web site and international accreditation documents.
2. CSU will review the MS program for renewable energy and electric power systems and provide feedback to UR.
3. CSU & UR develop cooperative program to supervise of PhD students
  - a. UR center director will send list of first class of PhD students to CSU
  - b. CSU will circulate the list amongst CSU faculty to identify faculty interested in supervising (as members of PhD committee) PhD students
  - c. UR/CSU college administration will discuss partnership programs for joint degree programs or other means of more comprehensive sharing of PhD supervision
4. CSU will support a staff/student exchange to understand current microgrid laboratory and to assist with the design of the UR/CST microgrid laboratory. Staff/students will travel to CSU for 2-4 weeks, engage in a small laboratory project, and, while at CSU, do conceptual design the laboratory facilities in Rwanda.
5. CSU/UR develop a working connection to the I/U CRC (Industry/university collaborative research center) focusing on photovoltaic system development. Initial target of this cooperation will be to establish PV system testing at UR in Kigali or surrounding area.
6. CSU will provide a formal invitation for the Principal of UR/CST and DVC-AAR to visit CSU for development of the above programs, and extensions into biomedical engineering,



atmospheric research, and potential cooperative work with Colorado School of Mines on mining and metallurgical technologies.

The above items are in direct support of the following paragraphs in the MOU signed by both universities 4 January 2017 (countersigned by Alan Rudolph for CSU on 18 January 2017): Sections 1.2.3-1.2.8, 1.2.11 of that agreement.



**Acknowledgements:**

**ACE-ESD of Rwanda**

Signature

  
28/9/2017

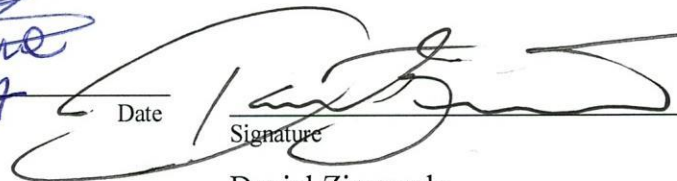
Date

Etienne Ntagwirumugara  
Professor, Electrical Engineering  
Head of the African Center of Excellence

**Acknowledgements:**

**Colorado State University**

Signature



Date

9/29/17

Daniel Zimmerle  
Senior Research Associate  
CSU Energy Institute

