Emily Rengers, M.S.

Email: emilyrengers1@gmail.com

Education: M.S., Envir. Tech., Federal University of Mato Grosso do Sul, Campo Grande, Brazil Nov. 2014
B.S., Civil Engineering, West Virginia University, Morgantown, WV May 2010

Professional Experience:

Freelance Translating Projects

Cactus Communications May 2016 - Present

- Translate scientific documents: Portuguese (Brazilian) - English

M21 Global Nov. 2016 - Present

- Translate documents: Portuguese (Portugal) - English

1 Workshop on risk assessment process, Federal University of Mato Grosso do Sul, Brazil May 2015

- Translated and interpreted: Portuguese (Brazilian) - English

Centro Cultural Anglo-Americano (CCAA), Rio Brilhante, MS, Brazil

English teacher Mar. 2015 - Present

- Teach advanced ESL, lead conversation classes and develop lessons plans to encourage participation

Independent Consulting Projects

*LavStar Lavanderia Industrial***,** *Campo Grande, MS, Brazil* Oct. 2015

- Hydraulic and sanitary deign with water reuse for the industrial laundromat

Teslenco Architecture and Construction, Campo Grande, MS, Brazil Jan. 2014

- Hydraulic design for the renovation of the Sesc-Horto buildings: Social Service of Commerce

Teslenco Architecture and Construction, Campo Grande, MS, Brazil

Staff Engineer Sept. 2010-Apr.2012

- General Responsibilities: Planned and designed hydraulic projects for industrial buildings, and confirmed site measurements. Design and analysis were performed using: AutoCAD, MS Excel, AltoQi-hydros.

Engineering Intern June 209-July 2009

- General Responsibilities: Assisted in project development including structural, hydraulic and electrical design.

Research Experience:

Investigated hydraulic performance of a constructed wetland system with computational fluid dynamics modeling. This research was done for my M.S. thesis at the Federal University of Mato Grosso do Sul.

Publications

- **Rengers, E.**, Silva, J., Paulo, P., Janzen, J. 2016. Hydraulic performance of a modified constructed wetland system through a CFD-based approach. Journal of Hydro-environment Research, 12, 91-104.

Presentations

- **Rengers, E.**, Silva, J., Paulo, P., Janzen, J. 2015. Evaluation of hydraulic efficiency of modified constructed wetlands using CFD. Brazilian Sanitary and Environmental Engineering Conference, Rio de Janeiro, RJ-BR. (ORAL)
- **Rengers, E.**, Janzen, J. 2015. CFD model validation for investigation of hydrodynamic behavior in the interior of horizontal subsurface flow constructed wetlands. Brazilian Sanitary and Environmental Engineering Conference, Rio de Janeiro, RJ-BR. (POSTER)
- **Rengers, E.**, Paulo, P., and Janzen, J. 2013. Application of computational fluid dynamic modeling to a horizontal subsurface flow constructed wetland for greywater treatment and reuse. 1st Brazilian symposium on the application of constructed wetlands in Wastewater Treatment, Florianópolis, SC-BR. (ORAL)

Computational Tools:

- *CAT Tool:* SDL Trados, memoQ, Wordfast Anywhere
- *Analysis/Presentation:* MS Word, MS PowerPoint, Excel, Prezi

Honors/Activities:

- Portuguese proficiency test, Brazil's National Study and Research Institute (INEP) (2011)
- Registered Engineer-in-Training: 9181, West Virginia (2010)
- Engineers Without Borders WVU, President/Co-founder (2008-2009)
- Chi Epsilon, Civil Engineering Honor Society, Secretary-WVU (2009-2010)