

**Energy & Water Systems for Remote Systems – October 22, 2014** by Prof. Amy Bilton

On October 22nd, Prof. Amy Bilton, Assistant Professor at the University of Toronto and Director of the [Water and Energy Research Lab](#) gave a presentation entitled, "Design of Energy and Water Systems for Remote Communities." She outlined an innovative design methodology for solar PV powered reverse osmosis systems. The design methodology can reduce the set of possible designs from larger than the number of atoms in the universe to a single optimal design. She also gave an in depth presentation of on-going research and collaboration with communities in the developing world, including in Mexico and in Nicaragua. One particular project she discussed involves a team of undergraduate students performing a capstone design project. The team has visited the community in Nicaragua and received positive feedback and engagement for the design and development of a wind powered irrigation system. Over 45 professionals, students and the public attended to learn about this innovative research, and many lingered on into the evening to ask in-depth questions regarding her work and the work of her lab.