



Mr. André Luis Céspedes da Silva

Universidade de São Paulo (USP), Faculdade de Zootecnia e Engenharia de Alimentos
Laboratório de Física Aplicada e Computacional (LAFAC)
Professor Responsavel: Prof. Dr. Ernane José Xavier da Costa

Dear Mr. Céspedes da Silva,

It is my great pleasure to invite you to participate in an exchange program at the University of Nevada Las Vegas (UNLV), College of Engineering. This program is an international exchange for students and faculty focusing on research related to the nexus between solar energy-water-and the environment. The program is funded jointly by the UNLV College of Engineering and the Nevada EPSCOR Nexus Grant, supported by the National Science Foundation (NSF Grant # 1301726). Last year professor Ernane Xavier da Costa visited us with the intention to develop research collaboration and exchange of students and faculty. Based on professor Costa's expertise and interest we have identified water issues and energy research as areas of collaboration. My colleague, Dr. Robert Boehm and I are the principal investigators of the NSF funded grant to study the interactions between solar energy, water and the environment. Dr. Boehm is the director of the UNLV Center for Energy Research (CER). As part of this research, Dr. Yahia Bagsouz, an electrical engineering professor, has built a Micro-grid with several electrical components (Schematic attached). The goal of the Micro-grid is to study the impact of different energy distribution and storage components on real electrical grids. Professor Ernane's research and collaboration with Lumilight from Recife, Brazil seems to be a great fit with the UNLV Microgrid study. Therefore, the purpose of your internship at UNLV would be to test the Lumilight filters in the Microgrid at UNLV and determine how well it would operate in a grid that receives different power types, including that generated by solar panels.

Your exchange program will be from 02/02/2016 to 02/20/2016 to install the Lumilight filters. You will then return in the summer along with professor Ernane to evaluate the data collected. It is our understand that during your stay in the United States, you will be financially responsible for all medical insurance and medical expenses, including emergency expenses as well as other essential expenses such as food, accommodation and utilities. We will however provide you with research space and full support of a technician to assist with the installation of the Lumilight filter and its removal from the Microgrid. We wish you a pleasant and productive visit to UNLV and are looking forward to meeting you in person.

Sincerely,

Jacimaria Batista

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