



UNIVERSITY OF WISCONSIN
PLATTEVILLE



“UWPLATT-UNESP Guaratinguetá International Exchange Student Initiative” Competition #12

Coordinators:

Prof. Dr. José Luz Silveira
jose luz@unesp.br

Prof. Dr. Samir El-Omari
elomaris@uwplatt.edur





Activities:

March of 2017 at Unesp – Guaratinguetá - Prof. Dr. Samir El-Omari (UWPLATT) participated on the the 3rd Workshop on Bioenergy, Renewable Energy and Green Buildings.

October of 2017 at UWPLATT - Prof. Dr. Celso Tuna (UNESP) developed lectures and work activities with a class of 12 students on the subject of thermal engineering: “Use of Biofuel in Microgasturbine and Internal Combustion Engine Cogeneration Systems” from October 2nd to 6th.





Activities:



November of 2017 at National University of Mar del Plata, Argentina - Prof. Dr. José Luz Silveira (UNESP) and Prof. Dr. Samir El-Omari (UWPLATT) met in Mar del Plata, Argentina, to attend the XII CLAGTEE: Latin-American Congress On Electricity Generation and Transmission from November 12th to November 15th.





Activities:



February of 2018 at UWPLATT - Prof. Dr. Teófilo Miguel de Souza was responsible for the course about Renewable Energies and applications of Wind and Solar Energies in Brazil.

- Solar energy for water heating, pumping of water and electricity generation;
- Wind energy for pumping of water and electricity generation;
- Pelton, Michell-Banki or Screw turbines. Calculations for powers less than 30 kW;
- Engine-generator (gasoline or diesel): Calculations for powers less than 30 kW.





Activities:



February of 2018 at UWPLATT - Four students from UNESP stayed for a month at the University of Wisconsin – Platteville, they attended to:

- Dr. El-Omari's class of Green Building Design;
- Developed energy auditing;
- Participated in two new energy-related projects from the University;
- Visited a local farm with renewable energies technologies installed;



Activities:



February of 2018 at UWPLATT

During their stay, the students lived on campus as recommended by the University. They shared apartments with local students for better integration and adaptation with local activities. The students also presented the following topics:

- **Cristhian Lao Vorobieff:** Solar-wind hybrid system ecological efficiency analysis;
- **Omar Llerena:** Dynamic Analysis of an ethanol steam reformer for hydrogen production;
- **Victor Arruda:** Hybrid Energy Generation Systems considering Renewable Energies and Bioenergy;
- **Fabício Falcão:** Solar Heating using reused fluorescent illumination material



Activities:



From May 21st until June 15th of 2018 at UNESP - 5 students from UWPLATT traveled to Brazil for study mission. During this period they have had access to the Institute of Bioenergy Research IPBEN-UNESP. They presented at the first Workshop on Renewable Energies and Green Buildings held at IPBEN-UNESP Guaratinguetá on June 8th, 2018





Activities:



From May 21st until June 15th of 2018 at UNESP

The students of UWPLATT presented the following topics:

- **Kyler Krush:** Passive Design Strategies in Tropical Climates;
- **Noah Fox:** Enhanced Performance PV with Thermal Cooling;
- **Rebecca Nicholson:** The Incorporation of Living Walls and Roofs into Sustainable Design;
- **Sam Dion-Gottfried:** Geothermal Power Generation;
- **Timothy Faber:** Economic Analysis of Photovoltaic Charging Stations for Heavy-duty vehicles

How did you find your partner?

.I meet my partner Prof. Samir El-Omari in CLAGTEE 2015, Brazil.

How do you identify the right partner?

.The right partner need to work in similar areas.

How did you develop the proposal with your partner? Suggestions/advice in that process (outreach, communication, mission/goals align, how can the institutions complement each other?)

.The proposal was developed together completing the needs of the two groups involved.

What worked well?

Lessons learned (what would you do differently)? etc.

.I beleave that if possible we be making make all again. The project was developed good manner and it possibilities aid the formation of good personalls in Green building using renewable energy topics.

unesp



**Grupo de Otimização
de Sistemas Energéticos**



**Thank you for the support and attention
(www.feg.unesp.br/ipben)**

jose.luz@unesp.br

celso.tuna@unesp.br

**Invitation to participate of 14th Latin-American Congress
on Electricity Generation and Transmission, November,
2022, Rio de Janeiro, Brazil**

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