

Professors and students of UNIFEI participate in different international scientific meetings.

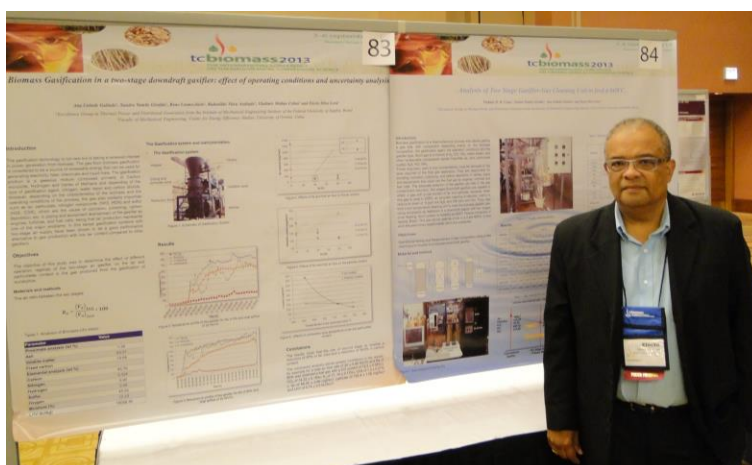
The “Thermochemical Biomass Conversion Seminar “, in Chicago Ill. , USA, September 3-6, 2013.

In this Seminar Prof. Electro Silva presented two Posters:

- a) Cobas, V.R.M., Giraldo, S.Y., Lora, E. “Analysis of two stage gasifier - gas cleaning unit to feed SOFC”
- b) Galindo, A.L., Giraldo, S.Y., Lesmes-Jaen, R., Andrade, R. V. “Biomass gasification two – stage downdraft gasifier. Effect of operating conditions and uncertainty analysis of biomass gasification and pyrolysis in the world.”

Specialists from Research Centers, Universities and Enterprises from all the world around, working in the topics of gasification and pyrolysis of biomasses for biofuel production attended the Seminar. The State of the Art of different projects in operation in Europe and USA for the production of DME, methanol and natural gas were discussed, as well as the use of biofuels in aircrafts.. The oral presentations and the posters of the Seminar could be found at:

<http://www.gastechnology.org/tcbiomass2013/pages/20ts-presentations.aspx>.



Prof. Silva- Lora during the presentation of two posters in the Thermochemical Biomass Conversion Seminar.

BECA – Biomass Energy Conference of the Americas.

The Conference was held in Medellín, Colombia, , October 10-11, 2013. The professors of UNIFEI Electo Silva Lora and Luis A. Horta Nogueira, were among the lecturers. The new trends and the development of new technologies for: the biodiesel production, the biorefineries, the biological treatment of solid urban wastes, the biogas, the internal combustion engines using alternative fuels, also some other topics related with the use of biomasses and the biofuels production were discussed

Lecturers from Research Centers, Universities and Enterprises of 12 countries took part. Professor Silva-Lora presented the lecture “Biofuels production from biomass through the thermochemical route” and Professor Horta Nogueira the one referred to “Perspectives of ethanol sustainability in Brazil.

The presentations of all the participants could be found in .

<http://becamericas.org/index.php/memorias>.



Prof. Lora during one of the sessions of the conference BECA 2013.

1st International Symposium on Biofuels

Professor Electo Silva, participated in this Symposium held in the Peruvian Amazonia, from 16-18 October, 2013, as Invited Lecturer and presented the conference about the “Life Cycle Analysis of 1st and 2nd generation biofuels”.

The Symposium was devoted to the evaluation of the State of the Art of the cultivation of the “Piñón Manso” (*Jatropha Curcas*) in the world, the evaluation of operating projects, the genetic improvement and the study of the LCA of the biodiesel obtained from this oleaginous crop. There was a visit to a 1 000 ha farm near Tarapoto and to a Center for the development of “Piñón Manso” varieties that has also a germplasm collection. The existing constraints for the commercial utilization of this crop, referred to flowering, cropping techniques, etc. were discussed. Specialists from Brazil, Spain, Colombia, Mexico, USA and Peru participate in this Symposium. It was concluded the need of further scientific works to ensure an effective domestication and genetic improvement of this oleaginous crop to ensure its successful commercial exploitation.



Prof. Silva Lora at his presentation in Tarapoto, Peru, about biofuels.

III International Congress on Environment and Renewable Energy. First International Journey on Residual Biomass. Villa María, Córdoba, Argentina, November 11-15, 2013.

In the Seminar Prof. Silva Lora presented two conferences:

- Advanced technologies for the conversion of biomass and residues.
- Energetic conversion of solid urban wastes.

The main topics of the Seminar were: biomass electric generation and co-generation and the use of wastes; the experiences of the collection, treatments and disposals of MSW in Spain, (Barcelona), Italia (Milan) and in Brazil were reported. Prof. Electo Silva presented the results of the projects of the Research Group NEST/IEM/UNIFEI, related to the Life Cycles Analysis of the different options for the conversion of the urban wastes, as well as the gasification of briquettes of refuse derived fuel (RDF) obtained after the selective collection of urban wastes.



Prof. Silva Lora at his presentation in the 1st International Journey of Biomass in Villa María, Córdoba, Argentina.

Forum: Potential energetic uses of the solid urban wastes, Bogotá, Colombia.

Prof. Electo Silva Lora and the PhD degree student Marcio Montagnana, both from UNIFEI , took part In this Seminar and two Conferences were presented:

- Thermochemical treatment of the urban solid residues (Prof. Lora).
- Life Cycle Analysis of the energetic conversion of the Urban Solid Residues (MSc. Montagnana).

This Forum was organized by the Special Administrative Unit of Public Services of the Municipality of Bogota, Colombia, and by the Iberoamerican Network of Bioenergy of CYTED, with the purpose of discussing different options for the management of the solid residues of the City of Bogota. The Forum included a technical visit to the Doña Juliana Landfill, which serves the whole City of Bogota and also to the plant for biogas collection and energy generation by internal combustion engines.

There was an evaluation of the possibility of using some of the gas to satisfy part of the fuel demand of bricks factories located near the landfill. As a conclusion it was stated the need to improve the application into the praxis of the use of the combined selective collection, together with the biological treatment of the biodegradable fractions and the thermal treatment of the rejected part. It was also advised the evaluation of the sustainability of the different routes through the life cycle analysis - LCA .



The group of lecturers and organizers of the Forum in Bogotá.