



Opportunity for Foreign Graduate Students

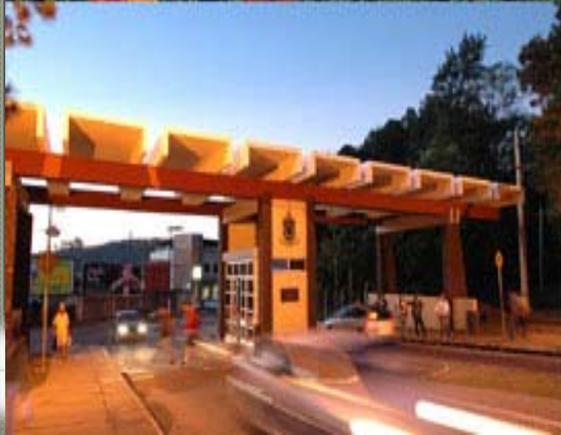
Moisés V. Ribeiro (Dr. Eng.)

*Assistant Professor at the Federal University of Juiz de Fora, Brazil
Management Committee of INERGE*

Position Available

- MSc Student (R\$ 1.200,00 per month – two years)
- Ph.D Student (R\$ 1.800,00 per month – four years)
- Research field:
 - R&D related to PHY and MAC layers of Power Line Communications Systems (signal processing, digital communication, network, FPGA implementation, instrumentation)
- No tuition fees

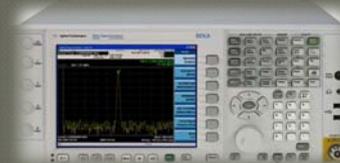
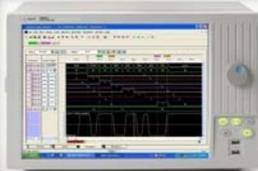
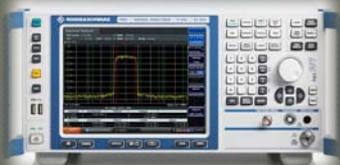
The UFJF Campus



Who are we?

- Signal processing and digital communications research group focused on power line communication (digital inclusion and smart grids).
- LAPTEL (Signal Processing and Telecommunication Laboratory) is a 100m² lab with infrastructure for the development and implementation of PHY/MAC layers of digital communication systems.

LAPTEL Facilities



What are we researching?

- R&D of FPGA chip for broadband and narrowband applications (10^{-2} , 450, 1000, and **2500 Mbps**).
- **MIMO, resource allocation, cognition, UWB, multicarrier for PLC systems.**
- Channel modelling of LV and MV grids for electric utilities.
- **PLC for offshore oil applications.**
- **PLC for smart grids applications.**

Current R&D Projects

- (2008-2012): *FPGA and ASIC prototypes of a low-cost BPLC for broadband access in LV electric grids.*
- (2011-2013): *FPGA prototype of a low-cost BPLC for a MAN in the MV electric grids. (will start 3Q11)*
- (2012): *FPGA prototype of a low-cost NPLC for smart grids in LV and MV electric grids.*
- (2010-2011): *Business plan related to a R&D project for **the flexible PLC technology** (power line + wireless = only one channel).*

Contact:

prof. Moisés Vidal Ribeiro

Federal University of Juiz de Fora

e-mail: mribeiro@ieee.org,

mribeiro@engenharia.ufjf.br

Homepage: <http://www.ppee.ufjf.br/>

skype: moviribeiro

Phone (Room): +55 32 2102 3483