A Laboratory Set-Up For Problem Based Learning

A group of Lecturers and undergraduate students of the College of Engineering of the State University of Rio de Janeiro - UERJ (Electrical Engineering Laboratory - LEE) have been working on the development of an experimental set-up to support a new learning methodology for teaching several disciplines in Modelling and Simulation, Instrumentation and Control Systems Engineering.

This paper deals with the hands-on implementation and subsequent evaluation of a single environment of a hybrid process control laboratory for undergraduate students of Electrical Engineering. The final goal is to integrate the set-up allowing on-line remote laboratory access to implement control algorithms and evaluate their performance. Preliminary results reflected an increase in motivation for students and staff.

Index Terms - Remote Control Laboratory, Hybrid Process Control, Problem Based Learning.

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