

# AN ICT-BASED PLATFORM FOR INTERACTIVE TRAINING AND TEACHING BASED ON PI REGULATOR

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- [1] **Abstract:** *The concept of virtual laboratories is becoming more and more applicable in the first place due to its efficiency. A virtual experiment is an experiment with the mathematical model of the system. This eliminates the need for a real laboratory. However, it is necessary to construct a precise mathematical model and an appropriate platform for an experiment. The proposed solution consists of three functional units: the teaching management system, the central PID system and the laboratory equipment integrated with the subject software and hardware. The central PID system consists of a software package that acts as a PID controller that ensures that each student has his / her login account in the central PID system. The software package offers the possibility of expanding the number of potential exercises on demand. The developed application is compatible with the teaching management software package and provides the opportunity to demonstrate the software and work in it without interruption to students through a group presentation. This model have been developed through the realization of the Erasmus+ project, WamPPP 561821-EPP-1-2015-1-RS-EPPKA2-CBHE-JP and practically is involved in the teaching process*

**Key word:** *virtual lab, mathematical model, central PID system, application, software*