

### ***Academic effectiveness of VISIR remote lab in analog electronics***

*Javier García-Zubía, Unai Hernández-Jayo, Ingvar Gustavsson and Gustavo Alves*

#### **Parallel Working Session 5: *Support technologies for remote and virtual experiments II***

**November 17, 16:40 – 18:00, Auditorium 3**

##### ***Abstract of Paper #21:***

The effectiveness of VISIR is compared to other experimentation activities under the point of view presented by the professor Soysal in 2000. Advantages and limitations are discussed in terms of equipment availability, infrastructure cost, and contribution to various elements of experimental learning.

### ***Remote Power Control: a Low-Cost Solution for Enabling Telematic Practices in a Network Lab***

*Tomas De Jesus Mateo Sanguino, Diego López Garcia and E. Cortés Ancos*

#### **Parallel Working Session 5: *Support technologies for remote and virtual experiments II***

**November 17, 16:40 – 18:00, Auditorium 3**

##### ***Abstract of Paper #22:***

The present paper describes a practical solution of elearning laboratory devoted to the study of computer networks. This laboratory has been proven with a group of students of Computer Science from the University of Huelva (UHU, Spain) during the year 2010/11. To achieve this objective, it has been necessary to create an entire network infrastructure that includes both the telematic access to the laboratory equipment and the remote power control. The interest of this work lies in an economical and simple system of remote control and telematics access that pursues a twofold objective. On the one hand, to develop distance practices with attendance appearance by means of real hardware systems, not simulated. On the other, to reduce the power consumption regarding other proposals of remote laboratories with permanent power connection, providing herein an on demand connection only when required. The result has been to put into practice a versatile and flexible laboratory whose basic network infrastructure allows transferring traditional practices to telematic practices in a natural way and without harsh changes.