

# **DISTRIBUTED REMOTE LABORATORY BASED ON WEB SERVICES TECHNOLOGY**

**Claudio De Capua<sup>1</sup>, Annalisa Liccardo<sup>2</sup>**

## **Abstract**

*In the paper, the authors a solution for distributed remote didactical laboratory, a project to which they have been working for the last two years [1]. The project has risen from the need to reduce laboratory load, due to the increasing number of undergraduates in Italian University; successively, jointly with the realization of an e-Learning portal for Electric and Electronic Measurement courses, it has represented a way to provide the laboratory experiences to students attending on-line courses. Through the remote laboratory, students are able to execute measurements controlling real instruments, only by means of a common browser. In order to make the laboratory flexible and to grant freedom from software to users, a solution based on Web Services, realized in Visual Basic .net, has been chosen. The recent work has been focuses on the management of connections and queues, for whose aim SQL databases have been involved.*