

CHEMISTRY FOR EVERYDAY LIFE EChemTest® WORKSHOP

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Aims of the workshop

During the last day of the Krakow General Assembly (GA), a workshop on EchemTest® Chemistry for everyday life Self Evaluation Session was run. The workshop was articulated into two separate events:

1. a presentation of the LibreEOL platform to the ECTN delegates made by Osvaldo Gervasi
2. a trial session on the library Chemistry for Everyday Life (CEL) made by Krzysztof Szczeponek aimed at showing the friendliness of the the LibreEOL platform.

The LibreEOL platform

LibreEOL is an open source platform developed by the group of Osvaldo Gervasi, Department of Mathematics and Computer Science at the University of Perugia. The platform is currently deployed on Amazon EC2 Cloud environment. The system is designed to deploy simultaneously a large number of tests (Self Evaluation Session (SES)) in computer laboratories or in supervised environments where is possible to control the assigned IP addresses.

The security is implemented at various levels: the IP of clients, a specific password for the exam session that the Examiner notifies to the participants, the randomized sequence of questions and related responses (i.e. responses presented to the candidate are listed randomly). The roles defined in the system are: Administrator, Teacher, Examiner, Student. From the Echemtest® point of view the most important roles are those of the Teacher (in EchemTest® the Teacher is the Panel of experts taking care of the maintenance of the considered library and related exam settings) and of the Examiner (the person generating the specific exam sessions and taking care of the reporting functions).

When the student registers, she/he selects the language; when the test is carried out, the system looks for the selected questions by the algorithm in the student's language. If the question is not available in the selected language, its English version (reference version) is proposed. This approach makes it easy and reliable to localize the EchemTest® libraries in the national languages. The models available to the teacher to formulate new questions are the following: Multiple Response, Multiple Choice, Yes/No, True/False, Text Match, Numeric, Filling blanks, Pull-down list, Matching, HotSpot.

During the test, each action performed by the student is saved on the server, so that the system is able to restore a test to the last saved action if something wrong happens (hardware failure, operating system failure, browser crash, etc).

The trial session on CEL

A trial session of LibreEOL on Chemistry for Everyday Life (CEL) library was run during the GA managed by Krzysztof Szczeponek, who firstly summarized the set of operations to be performed for carrying on an exam session, and then assisted the participants in carrying out the test.

Six people (out of a fairly large audience) took active part to the trial. All of them appreciated the software platform and the tests while two of them performed excellent (score >70). The series of questions and remarks made at the end of the presentation showed a large appreciation of the LibreEOL system and of the functionalities available in the platform.