

## Study Group Education Report 2010/2011

Members of the Study Group actively participated in various activities on national and international levels, e.g., in the discussions, recommendations and proposals to the Ministry of Education for the preparation of a new law for the educational system in Greece (Milt Karayannis).

The Symposium Education at Euroanalysis 16 in Belgrade is the most visible activity of the SG. The symposium is again located at a very prominent place within the programme of Euroanalysis (Slavica Razic). Very attractive speakers contribute to the three topics of the symposium, (i) international approaches to teach Analytical Chemistry, (ii) new topics for curricula in Analytical Chemistry and (iii) cooperation with industry for the M.Sc. education in Analytical Chemistry (Reiner Salzer).

As it was the case for recent Euroanalysis conferences, contributions to the educational session at Euroanalysis 16 shall be published in the educational column of Analytical and Bioanalytical Chemistry "ABCs of Teaching Analytical Science". All symposium speakers agreed to submit their contribution to ABC (Reiner Salzer).

The Analytical Chemistry part of EChemTest ([www.echemtest.net](http://www.echemtest.net)) is supervised by Milt Karayannis (Greece). A set of new computational questions and problem solving tasks are about to be completed and added to the system. Of great importance are new collections of questions on interdisciplinary applications of analytical chemistry, like food analysis, environmental analysis, archeometry, clinical and medicinal analysis as well as forensics analysis will be added subsequently.

The current state of EChemTest is described in the article "Self-assessment and controlled examination in analytical chemistry by use of the EChemTest" (Miltiades I. Karayannis & Constantinos E. Efstathiou, *Anal Bioanal Chem* (2011) 400:3181–3185). This paper describes the background of EChemTest, gives some theoretical background concerning analytical chemistry curricula, some examples of classical analytical chemistry and its importance for performing reliable measurements in modern instrumental analysis, summarizes the structure of the library including the different schemes of the questions, and finally explains the different fields of questions in Analytical Chemistry.

The Ministers of the Bologna states decided during their conference in Bergen/Norway in 2005 to include PhD curricula as third cycle into the Bologna Process. This requires the development of a quality standard for PhD degrees. So far the national requirements for obtaining a PhD certificate are hardly comparable. The discussion about a quality framework is already in an advanced state. A standard with emphasis on generic skills shall be approved during a meeting in Leipzig (29.-30.09.2011, Reiner Salzer).

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