

Study Group / Task Force Name: SG Education

Study Group / Task Force Members and Affiliations:

Dr. Jens E.T. Andersen , Technical University of Denmark, Kongens Lyngby, Denmark

Prof. Dr. Miltiades Karayannis, University of Ioannina, Greece

Prof. Dr. Slavica Razic, University of Belgrade, Serbia

Prof. Dr. Reiner Salzer, Technische Universität Dresden, Germany

Objectives:

Teaching analytical chemistry at the beginning of the 21st Century

Partner in the development of quality labels for chemistry-related degrees (Bachelor, Master, Ph.D.)

Electronic media in teaching and assessing analytical chemistry

Cooperation with other SGs of DAC

Activities and Outputs in 2011-2012 (e.g. reports, publications, seminars, meetings):

The EChemTest library of ECTNA extended with questions in all fields of Analytical Chemistry (M. Karayannis, R. Salzer).

Participation in the development of a quality standard for Ph.D. curricula in Europe (R. Salzer).

Participation in working groups for developing new programmes in teaching chemistry in Secondary Schools (M. Karayannis)

Publications:

M. Karayannis et al., Significant Steps in the Development of Analytical Chemistry; TALANTA, in press.

R. Salzer, Changing careers in chemistry, *Analyt. Bioanalyt. Chemistry* 402 (2012) 25–28.

J. Barek, R. Salzer, P. Worsfold, J. Andersen, Analytical chemistry in Europe - education, research, publications and conference, *Trends in Analytical Chemistry* 35 (2012) 1-2.

Co-edition of the column “ABCs of Teaching Analytical Chemistry” in *Analyt. Bioanalyt. Chem.* (R. Salzer).

[J. E. T. Andersen, D. T. Burns and P. Hu, Basic mathematics and physics for undergraduate chemistry students according to the Eurobachelor® curriculum, *Analyt. and Bioanalyt. Chemistry* 403 \(2012\) 1461-1464, DOI: 10.1007/s00216-012-5854-5](#)

Lectures:

R. Salzer, Stimulating Entrepreneurship, EC2E2N Annual Meeting, Mailand, 25.-28.04.12

R. Salzer, Education and Skills for Analytical Sciences, Europe & Metrology in Turkey (EMIT), Istanbul, 11.-13.06.2012

R. Salzer, Changing Careers in Chemistry, 22. Intern. Conf. Chem. Education & 11. Europ Conf. Res. Chem. Educ., Rome, 15.-20.07.2012

R. Salzer, Entrepreneurial attitude: What we already teach and what not (yet), 4th EuCheMS Chemistry Congress, Prague, 26.-30.08.2012

Meetings:

The development of generic skills in Ph.D. curricula, Leipzig, 29.-30.09.2011 (R. Salzer)

Symposium Education during Euroanalysis 16, Belgrade, 11.-15.09.2011 (R. Salzer)

Workshop “Stimulating Entrepreneurship”, Milan, 27.04.2012 (R. Salzer)

Preparation of the Symposium Education at Euroanalysis 17 in Warsaw (R. Salzer).

Activities planned for 2012-2013:

Teaching analytical chemistry at the beginning of the 21st Century

Evaluation of curricula in analytical chemistry at the current stage of the Bologna process

Emphasis on case studies in teaching analytical chemistry

Electronic media in teaching and assessing analytical chemistry

Cooperation with other SGs of DAC

Report submitted by: Reiner Salzer
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