

## EuCheMS-DAC Study Group / Task Force Annual Report for 2017-2018

Study Group / Task Force Name: SG Education
Study Group / Task Force Members and Affiliations: Prof. Dr. Reiner Salzer, Dresden University of Technology, Germany (Head of Group 2017) Prof. Dr. Ivo Leito, University Tartu, Estonia Prof. Dr. Miltiades Karayannis, University of Ioannina, Greece Dr. Martin Vogel, University of Muenster, Germany (Head of Group 2018) Ex-officio members: Prof. Dr. Wolfgang Buchberger, Austria, and Prof. Dr. Marcela Segundo, Portugal
Objectives: Teaching analytical chemistry at the beginning of the 21st Century Evaluation of curricula in analytical chemistry at the current stage of the Bologna process European Employment Survey for Chemists and Chemical Engineers Electronic media in teaching and assessing analytical chemistry
Activities and Outputs in 2017-2018 (e.g. reports, publications, seminars, meetings): Symposium Education during Euroanalysis 2017, Stockholm, 2017, August 28 – September 01, 2017 (R. Salzer) Co-edition of the educational column in Analytical and Bioanalytical Chemistry (R. Salzer) Co-edition of the educational column in Analytical and Bionalytical Chemistry (M. Vogel, since 04/2018) Evaluation of the second edition of the European Employment Survey for Chemists and Chemical Engineers (ESEC2) and preparation of the report (R. Salzer) Project “Global Standards for Teaching Chemistry at Universities” (R. Salzer) Chief-Editor of the Journal CHIMIKA CHRONIKA (M.I.Karayannis) <b>Publication:</b> R. Salzer; Smartphones as Audience Response Systems for lectures and seminars; Anal. Bioanal. Chem. 410 (2018) 1609-1613. Fifth edition of the MOOC “Estimation of Measurement Uncertainty in Analytical Chemistry” ( <a href="https://sisu.ut.ee/measurement/uncertainty">https://sisu.ut.ee/measurement/uncertainty</a> ) (I. Leito), see also <a href="https://each.ut.ee/EACH/measurement-uncertainty-online-course-mooc-2018-edition-successfully-finished/">https://each.ut.ee/EACH/measurement-uncertainty-online-course-mooc-2018-edition-successfully-finished/</a> . Second edition of the MOOC "LC-MS Method Validation" ( <a href="https://sisu.ut.ee/lcms_method_validation/">https://sisu.ut.ee/lcms_method_validation/</a> ) (I. Leito), see also <a href="https://each.ut.ee/EACH/lc-ms-method-validation-online-course-mooc-423-participants-from-71-countries/">https://each.ut.ee/EACH/lc-ms-method-validation-online-course-mooc-423-participants-from-71-countries/</a> . <b>Meetings:</b> E. Sinagra, R. Salzer; European Chemistry Thematic Network Association and New Schemes for the QA of Chemistry Education; 4thASIIN/EASPA Global QA Conference in Higher Education 2017; Düsseldorf; 2017, December 12 R. Salzer; European Quality Standards for PhD Studies; UCT Prague; 2018, March 06 R. Salzer; How to Navigate to your Dreamjob?; Excellence in Analytical Chemistry Summerschool; Tartu; 2018, May 14-17 R. Salzer; From the 2nd European employment survey for chemists & chemical engineers to a joint EuChemS/ACS project; EuChemS General Assembly 2018; Liverpool; 2018, August 26-30 R. Salzer; Sustainable Quality Education requires Global Standards; Chemistry for sustainable goals – panel discussion; 7th European Chemistry Congress; Liverpool; 2018, August 26-30 M.I.Karayannis, “Magic, Mysticism, Metaphysics and Science during the Development of Chemistry and Analytical Chemistry from the Ancient Times to the Middle of the 20th Century”, 10th IMA – Conference, 17-21 September 2017 IRAKLION, GREECE I. Leito "Online Analytical Chemistry courses at University of Tartu", CroLab 13. International Conference, 04. - 07. OCTOBER 2017, Poreč, Croatia. Training courses and/or sessions in metrology in chemistry and/or education: Tutorial on measurement uncertainty in chemical analysis during EcoBalt 2016, 09.10.16 (Tartu); Measurement Uncertainty tutorial at Latvian University (Riga) 08-09.12.16; Presentation on EACH EM JMD during Erasmus+ International Dimension 24.11.16 (Vilnius).
Activities planned for 2018-2019: Teaching analytical chemistry at the beginning of the 21st Century Evaluation of curricula in analytical chemistry at the current stage of the Bologna process Employment Survey for Chemists and Chemical Engineers together with ACS Global Standards in Teaching Chemistry at Universities Electronic media in teaching and assessing analytical chemistry Education Session during Euroanalysis 2019 in Istanbul Continuation of setting up MOOC “Instrumental Analysis of Cultural Heritage Objects” at University of Tartu
Report submitted by: Martin Vogel
Date submitted: August 10, 2018

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