

EuChemS-DAC Study Group / Task Force Annual Report for 2020-2021

Study Group / Task Force Name: SG Education
Study Group / Task Force Head and Affiliation: Dr. Martin Vogel, University of Muenster, Germany
Study Group / Task Force Members and Affiliations: Prof. Dr. Reiner Salzer, Dresden University of Technology, Germany Prof. Dr. Ivo Leito, University Tartu, Estonia Prof. Dr. Miltiades Karayannis, University of Ioannina, Greece Dr. Martin Vogel, University of Muenster, Germany
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 2020-2021 (e.g. reports, publications, seminars, meetings): General: -Evaluation of the responses to the ACS/EuChemS Joint Employment Survey for Chemists and Chemical Engineers in March 2020. Support by several organisations including DAC is again gratefully acknowledged (R. Salzer). - Co-editor of the educational column in "Analytical and Bioanalytical Chemistry", focus on article series on teaching of analytical chemistry during the pandemic (M. Vogel). Courses: -8 th edition of the MOOC "Estimation of Measurement Uncertainty in Analytical Chemistry" (https://sisu.ut.ee/measurement/uncertainty) (I. Leito), see also https://each.ut.ee/EACH/measurement-uncertainty-online-course-8th-run-has-successfully-finished/ -Fifth edition of the MOOC "LC-MS Method Validation" (https://sisu.ut.ee/lcms_method_validation/) (I. Leito), see also https://each.ut.ee/EACH/lc-ms-method-validation-online-course-finished-with-28-completion-rate/ -The online learning materials of the MOOC "Instrumental Analysis of Cultural Heritage Objects" (https://sisu.ut.ee/heritage-analysis/) are close to completion. Some polishing is still needed and the graded tests have to be created. We expect to start the first run of this MOOC in 2022. Report & Publications: -Leito, I., Helm, I. <i>J. Chem. Metrol.</i> 2020 , <i>14</i> , 83-87. Metrology in chemistry: some questions and answers. http://doi.org/10.25135/jcm.50.20.10.1838 -Salzer, R., Technische Universität Dresden, Thorburn Burns, D., The Queen's University of Belfast, Beyer, L., Universität Leipzig, <i>Chemistry as a University Degree - Development and impact</i> . European laboratories - University Dorpat - The naturalist Alexander Petzholdt, Universitätsverlag Leipzig, approx. 172 pages, 24,00 €, ISBN 978-3-96023-416-6 -Contribution "Teaching analytical chemistry during the pandemic: An enduring endeavour – but not in vain!" on the aforementioned article series to the "European Analytical Column" (M. Vogel) Meetings: How to Navigate to your Dreamjob? Summerschool of the Erasmus+ programme "Excellence in Analytical Chemistry"; Tartu; 2020, November 18 – November 25 (R. Salzer, I. Leito)
Activities planned for 2021-2022: -Continuing with online courses of uncertainty and validation at University of Tartu (I. Leito) -Continuation of setting up MOOC "Instrumental Analysis of Cultural Heritage Objects" at University of Tartu. The first run of this MOOC is expected to start in 2022 (I. Leito) -Evaluation of the ACS/EuChemS Joint Employment Survey for Chemists and Chemical Engineers (R. Salzer). -Publication of the results of the ACS/EuChemS Joint Employment Survey for Chemists and Chemical Engineers (R. Salzer). -How to Navigate to your Dreamjob? Summerschool of the Erasmus+ programme "Excellence in Analytical Chemistry"; Tartu; November 2021 (R. Salzer, I. Leito) -Organization of educational session for Euroanalysis 2023 in Geneva (M. Vogel, SG Education) -Summary and survey on alternative teaching forms in Analytical Chemistry established during the pandemic (M. Vogel)
Report submitted by: Dr. Martin Vogel
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