

## **EuChemS-DAC Study Group / Task Force Annual Report for 2019-2020**

Study Group / Task Force Name: SG Education
Study Group / Task Force Members and Affiliations: <i>Prof. Dr. Reiner Salzer, Dresden University of Technology, Germany</i> <i>Prof. Dr. Ivo Leito, University Tartu, Estonia</i> <i>Prof. Dr. Miltiades Karayannis, University of Ioannina, Greece</i> <i>Dr. Martin Vogel, University of Muenster, Germany (Head)</i>
Objectives: <i>Teaching analytical chemistry at the beginning of the 21st Century</i> <i>Evaluation of curricula in analytical chemistry at the current stage of the Bologna process</i> <i>European Employment Survey for Chemists and Chemical Engineers</i> <i>Electronic media in teaching and assessing analytical chemistry</i>
Activities and Outputs in 2019-2020 (e.g. reports, publications, seminars, meetings): <i>1. Karayannis, M. I.; Publications in the Journal CHIMIKA CHRONIKA (The official Journal of the Greek Chemists Association) on the Chemical Elements on the occasion of the celebration of the 100 years from the publication of the of the Periodic Table of the Elements (Historical information on the discovery and applications of the elements., poems on the elements of the periodic table etc.)</i> <i>2. Leito, I., Teearu, A., Bobacka, J. et al; "EACH (Excellence in Analytical Chemistry), an Erasmus Mundus Joint Programme: progress and success." Anal. Bioanal. Chem. 411, 5913–5921 (2019).</i> <i>3. Salzer, R.; "Diploma Supplement neu formuliert" Nachr. Chem. 67 (7-8), 15 (2019)</i> <i>4. Karayannis, M. I.; Participation in the 1st INTERNATIONAL CONGRESS of the EUROPEAN ASSOCIATION OF PROFESSORS EMERITI: The Capital of Knowledge, MAY 30-31 and JUNE 1, 2019 ATHENS, GREECE. Paper presented: MAGIC, MYSTICISM, METAPHYSICS AND SCIENCE DURING THE DEVELOPMENT OF CHEMISTRY FROM THE ANCIENT TIMES TO THE BEGINNING OF THE 20th CENTURY.</i> <i>5. Karayannis, M. I.; Participation in the 11th International Conference Instrumental Methods of Analysis, September 22-25, 2019, Ioannina Greece. Paper presented: ONE HUNDRED AND FIFTY YEARS OF THE PERIODIC TABLE: Dmitri Mendeleev is recognized as a discoverer and inventor, Chemists become "prophets", and the "entropy" of the chemical knowledge is diminishing.</i> <i>6. Salzer, R.; Participation in the Summerschool of the Erasmus+ programme "Excellence in Analytical Chemistry"; Tartu; 2020, April 27 - May 08. Paper presented: How to Navigate to your Dreamjob?</i> <i>7. Vogel, M.; Participation in XX euroANALYSIS, September 1-5, 2019, Istanbul/Turkey, Co-chair (together with C. Turner) of the Education Session on September 2, 2019.</i> <i>8. Execution of the ACS/EuChemS Joint Employment Survey for Chemists and Chemical Engineers in March 2020. Support by several organisations including DAC is gratefully acknowledged.</i> <i>9. Vogel, M.; Co-edition of the educational column in Analytical and Bioanalytical Chemistry.</i> <i>10. Leito, I.; Online course: Seventh 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>), see also <a href="https://each.ut.ee/EACH/measurement-uncertainty-online-course-2020-highest-ever-completion-rate-55/">https://each.ut.ee/EACH/measurement-uncertainty-online-course-2020-highest-ever-completion-rate-55/</a></i> <i>11. Leito, I.; Online Course: Fourth 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>), see also <a href="https://each.ut.ee/EACH/lc-ms-method-validation-online-course-finished-with-31-completion-rate/">https://each.ut.ee/EACH/lc-ms-method-validation-online-course-finished-with-31-completion-rate/</a></i>
Activities planned for 2020-2021: <i>- Leito, I.; Continuing with online courses of uncertainty and validation at University of Tartu..</i> <i>- Leito, I.; Continuation of setting up MOOC "Instrumental Analysis of Cultural Heritage Objects" at University of Tartu.</i> <i>- Leito, I.; Writing publication, tentatively titled "Metrology in Chemistry: some questions and answers".</i> <i>- Salzer, R.; Evaluation of the ACS/EuChemS Joint Employment Survey for Chemists and Chemical Engineers (R. Salzer).</i> <i>- Salzer, R.; Publication of the results of the ACS/EuChemS Joint Employment Survey for Chemists and Chemical Engineers</i> <i>- Salzer, R.; How to Navigate to your Dreamjob? Summerschool of the Erasmus+ programme "Excellence in Analytical Chemistry"; Tartu; 2021</i> <i>- Vogel, M.; Education Session during XXI Euroanalysis</i> <i>- Vogel, M.; Continuation of Co-edition of the educational column in Analytical and Bioanalytical Chemistry</i>
Report submitted by: Dr. Martin Vogel
Date submitted: August 13 <sup>th</sup> 2020

