

EuChemS-DAC Study Group / Task Force Annual Report for 2018-2019

<p>Study Group / Task Force Name: Quality Assurance</p>
<p>Study Group / Task Force Members and Affiliations:                  Elin L.F. Gjengedal (Head; EG), Liaison to Eurachem, Norwegian University of Life Sciences, Norway. Hendrik Emons (HE), Joint Research Centre (JRC), European Commission (EC), Belgium. Constantina P. Kapnissi-Christodoulou (CKC), University of Cyprus, Cyprus. Ricardo Bettencourt da Silva (RBS), Universidade de Lisboa, Portugal</p>
<p>Objectives: Report on activities in metrology, quality assurance, accreditation and all areas related to quality issues of analytical chemistry. Liaison to other Divisions, working groups, working parties and governmental bodies. Accreditation of laboratories is common practice in industry and accreditation is introduced in order to sustain quality and reliability. Practices and procedures of quality assurance are considered also in science and the influence on quality of scientific results is evaluated and discussed. The aim of the Study Group 'Quality Assurance' is to follow the development of quality assurance and metrology in analytical chemistry and produce guidelines for assessing the quality of results, which ultimately can create a new basis for decision-making that may have an impact on the way research is carried out. Both statistics and metrology are currently considered for further developments and improvements as to meet contemporary demands for quality in analytical chemistry.</p>
<p>Activities and Outputs in 2018-2019 (e.g. reports, publications, seminars, meetings): We contribute to activities in Eurachem, a network of organisations in Europe having the objective of establishing a system for the international traceability of chemical measurements and the promotion of good quality practices is developing and disseminating (free of charge via <a href="http://www.eurachem.org">www.eurachem.org</a>) information on quality assurance etc. Eurachem recently published a Guide: "Traceability in Chemical Measurement", 2<sup>nd</sup> edition (2019) as well as new Information Leaflets (available in different languages): "ISO/IEC 17025:2017 - A New Accreditation Standard" (2018) as well as "Setting target measurement uncertainty" (2018).</p> <p><i>Meetings:</i>                  V Iberoamerican Congress of Laboratories - Conformity Assessment, Lisboa, Portugal, 17-19 Oct. 2018. (RBS)                  CONFMET 2018 – Conferência Nacional da SPMET – Em constante evolução o Sistema Internacional de Unidades, Caparica, Portugal, 28-29 Nov. 2018. (RBS)                  Workshop - Validation of targeted and non-targeted methods of analysis, Tartu, Estonia, 20-21 May 2019. (RBS)                  34th CITAC Members' Meeting and Workshop, Paris, France, 13 April 2019. (RBS)                  IUPAC/CITAC Workshop on Quality of Test Results for Conformity Assessment of a Chemical Composition. What is Good and What is Bad? Tel Aviv. 21 Jan. 2019. (RBS)                  Isranalytica 2019, Tel Aviv. 22-23 Jan. 2019. (RBS)                  21<sup>th</sup> Norwegian Chemical Society National Congress, Lillestrøm, Norway, 16.-18. Oct. 2018. (EG)</p> <p><i>Publications:</i>                  Anes, B., <b>Silva, R. B.</b>, Oliveira, C., Camões, M. F. Measurement 129 (2018) 395-404.                  Anes, B., <b>Silva, R. B.</b>, Oliveira, C., Camões, M. F. Talanta 193 (2018) 118-122.                  Bjørgen, M., H. Eilertsen, <b>E.L.F. Gjengedal</b>, M. Aerts &amp; S. Svelle. <i>KJEMI</i> 3 (2019), pp. 22-27.                  Borges, C., Palma, C., <b>Silva, R. B.</b> Anal. Chem. 91 (2019) 5698-5705.                  Corbisier, P., <b>Emons, H.</b> Anal. Bioanal. Chem. 411 (2019) 7-11.                  Cordeiro, F., Bratinova, S., Karasek, L., Buttinger, G., Stroka, J., Emteborg, H., Seghers, J., Robouch, P., <b>Emons, H.</b> Food Additives &amp; Contaminants, Part A 36 (2019) 904-910.                  Dadamos, T., Damaceno, A., Fertonani, F., <b>Silva, R. B.</b> Anal. Chim. Acta 1059 (2019) 28-35.                  Dehouck, P., Koeber, R., Scaravelli, E., <b>Emons, H.</b> Accr. Qual. Ass. 24 (2019) 151-156.                  Ferreira, D., Barros, M., Oliveira, C., <b>Silva, R. B.</b> Microchemical Journal 146 (2019) 856-863.  <b>Gjengedal, E.L.F.</b> QUALITY ASSURANCE   Accreditation. In P. Worsfold, C. Poole, A. Townshend and M. Miro (Eds.) <i>Encyclopedia of Analytical Science</i>, 3<sup>rd</sup> Edition, Vol. 8 (2019), pp 445-449, Elsevier.                  Kuselman, I., Pennechi, F., <b>Silva, R. B.</b>, Hibbert, D. B. Talanta 189 (2018) 666-674.                  Lourenço, F., <b>Silva, R. B.</b> Talanta 196 (2018) 174-181.                  Lourenço, F., Saviano, A., <b>Silva, R. B.</b> Regulatory Toxicology and Pharmacology 102 (2019) 117-124.                  Narciso, J., Luz, S., <b>Silva, R. B.</b> Anal. Chem. 91 (2019) 6638-6644.                  Palma, C., Morgado, V., <b>Silva, R. B.</b> Talanta 192 (2018) 278-287.                  Separovic, L., <b>Silva, R. B.</b>, Lourenço, F. Chemometrics and Intelligent Laboratory Systems 15 (2019) 161-168.  <b>Silva, R. B.</b>, Pennechi, F., Hibbert, D. B., Kuselman, I. Chemometr. Intell. Lab. Syst. 182 (2018) 109-116.  <b>Silva, R. B.</b>, Lourenço, F., Pennechi, F., Hibbert, D. B., Kuselman, I. Chemometr. Intell. Lab. Syst. 188 (2019) 1-5.</p>
<p>Activities planned for 2019-2020:                  1) Follow activities of Eurachem and contribute to meetings and publications, e.g. The Eurachem General Assembly and associated working group meetings; 2) Publish results of quality assurance in appropriate journals; 3) Publish two pages technical notes (EuChemS-DAC-QA) that present simple QA tools and concepts.</p>
<p>Report submitted by: <i>Elin Gjengedal</i></p>
<p>Date submitted: 6th August 2019</p>