EuChemS-DAC Study Group Annual Report for 2020-2021

Study Group / Task Force Name: Bioanalytics Study Group

Study Group / Task Force Members and Affiliations:

Head of Study Group: Raluca-Ioana van Staden – Romanian Chemical Society

Guenter Gauglitz – Gesellschaft Deutscher Chemiker (GDCh)

Jan Labuda – Slovak Chemical Society

Jacobus Frederick van Staden – South African Chemical Institute

Marcela Alves Segundo – ex officio

Coral Barbas Arribas - UCEU San Pablo, Spain

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Ede Bodoki – UMedicine and Pharmacy Iuliu Hatieganu, Cluj Napoca, Romania

Mehmet Gumustas – AnkaraU, Turkey

Hendrik Emons - IRMM-JRC, European Commission

Jose M. Pingarron – Spanish Royal Society of Chemistry

George Horvai – Hungarian Chemical Society

Objectives:

The aim of the Bioanalytics study group is to search ways for bringing closer the analytical and bioanalytical chemistry community.

Main purpose of this group is besides "listing" of methods and "applications" a help for deciding which to use for what and warn about pitfalls. It might be a help for those using analytics in fields like life science, environment and food analysis and not being a really well-trained Analyzer.

Activities and Outputs in 2020-2021 (e.g. reports, publications, seminars, meetings):

Four more specialists from the fields of -omics, HPLC, RAMAN agreed to be part of the study group. They contributed to the Concept of Bioanalytics based on their field of expertise.

Two articles were sent to special issues on cancer research – as part of work/concept developed within/for the study group. When accepted, they will be published as open access feature articles.

A paper entitled: Enantioanalysis – a step forward for early detection of gastric cancer – was accepted to be presented at 7th International Conference on Sensors Engineering and Electronics Instrumentation Advances (SEIA' 2021), 22-24 September 2021, Palma de Mallorca, Mallorca (Balearic Islands), Spain, and it will also be published in the special issue of the conference; the paper acknowledges the contribution of DAC study group on bioanalytics.

At Analytica 2020, 4 sessions have been organised on bioanalytical topics. Due to the cancellation because of Corona Analytica went online and Journal ABC has published a topical Collection of 14 papers on "Recent Trends in (Bio)analytical Chemistry".

Over 500 publications were published in the field of bioanalysis by members of DAC, as well as researchers involved in the bioanalytics field.

Activities planned for 2021-2022:

Improving the document on Concept for study group Bioanalytics; the next topics are: IR and FT-IR; SEM, AFM.

Planning for special session on Bioanalysis in the coming conference.

Preparing reviews related to bioanalysis (topics: sensors, -omics, HPLC, RAMAN), and their publication as open access for increasing the visibility of the study group.

Meetings with the study group members at conferences in 2022; a special meeting will be arranged at the RO' ICAC 2022.

Report submitted by: Prof Dr habil Raluca-Ioana van Staden

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