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

Coral Barbas Arribas - UCEU San Pablo, Spain

Ryszard Lobinski – UPAU, France

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

Mehmet Gumustas – AnkaraU, Türkiye

Jose M. Pingarron – Spanish Royal Society of Chemistry

Viola Horvath – 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 Analist.

Activities and Outputs in 2022-2023 (e.g. reports, publications, seminars, meetings):

A workshop on Bioanalysis was organized on the national level in Romania, 2-3 February 2023. **PBA 2023**, **Ankara**, **Türkiye**, 33rd International Symposium on Pharmaceutical and Biomedical Analysis (PBA 2023) held between July 2-6 2023, in Ankara: Short course: SPME: New Developments and Pharmaceutical Applications (sample preparation in bioanalysis is included); Conference special issue will be published in Journal of Pharmaceutical and Biomedical Analysis.

EUROANALYSIS Geneva 2023: Short course: Trends in Bioanalysis; Study group minisymposium; 20<sup>th</sup> International Symposium and Summer School on Bioanalysis, June 24-30, 2022, Pécs, HUNGARY; IUPAC Technical Report Analytical chemistry of engineered nanomaterials with parts on fate and analyses of NMs in biological samples. J Labuda - liason person between ACD IUPAC and DAC/EuChemS

All, six Universities in Madrid with grades in Chemistry or Chemistry related topics (Pharmacy, Biochemistry, etc.), have developed and approved through the Ministry of Education an official master entitled: Universitary Master in Analytical and Bioanalytical Sciences and Technologies.

## Activities planned for 2023-2024:

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. **MG**, **Editor of a Special Topic**: Pharmaceutical and **Biomedical Applications** in Separation Techniques: Recent Trends and Developments, https://www.mdpi.com/topics/7G6FXDS84D, Deadline 31 March 2024, Journals: Metabolites, Molecules, Pharmaceuticals, Pharmaceutics, Separations.

**IUPAC project** "Electroanalytical flow through systems for monitoring of biologically and electrochemically active species" J Labuda - liason person between ACD IUPAC and DAC/EuChemS **ROICAC 2024**:

Organizing a workshop on bioanalytics in Bucharest, Romania with the main scope of improving the concept on Bioanalytics, and also publish the presented papers in a special issue.

Organizing a round table with members of the study group able to improve the Concept on Bioanalytics document.

## Analytica 2024

3 Sessions on Trends in Analytical&Bioanalytical Chemistry: (1) Miniaturized biosensors for clinical diagnostics (2) Towards self-driving labs (3) Lateral Flow Chips\_\_\_\_\_

Report submitted by: Prof Dr habil Raluca-Ioana van Staden Amerikaanse Date submitted: 31/07/2023