EuChemS-DAC Study Group / Task Force Annual Report for 2022-2023

Study Group / Task Force Name: Sample Preparation

Study Group / Task Force Head and Affiliation: Elia Psillakis, TUCrete, Greece

Study Group / Task Force Members and Affiliations: Manuel Miró, UBalearic Islands, Spain; Stig Pedersen-Bjergaard, UOslo, Norway; Slavica Ražić, UBelgrade, Serbia; Marcela Segundo, UPorto, Portugal; Sibel A. Ozkan, UAnkara, Turkey; Charlotta Turner, LundUni, Sweden; Barbara Bojko, NicolausCopernicusUni, Poland; Ezel Boyacı, METU, Turkey. International members: Janusz Pawliszyn, UWaterloo, Canada; Gangfeng Ouyang, SYSU, China **Objectives:** The objectives of the Sample Preparation Study Group are the promotion of Sample Preparation through the organization of events, facilitation of communication, information exchange and networking, and the promotion of fundamental studies and cross-disciplinary collaboration. To further benefit the area, efforts were placed on promoting innovation and entrepreneurship next to promote early stage researchers' involvement Activities and Outputs in 2022-2023: The Sample Preparation Network working under the umbrella of this Study Group now counts 780 members from 55 countries around the world. The network has five working groups (WG: WG1. Science and Fundamentals; WG2. Automation, Innovation and Entrepreneurship; WG3. Information Exchange and Networking) and WG4. Green Sample Preparation that represent the most important directions in the field. In 2023 we created our first Task Force (TF1) on Green Metrics that supports our network members by answering questions on e.g., the criteria used for assessing analytical methods, the use of the corresponding open-source software, the quantification of specific criteria etc. The four leaders of TF1 are younger members of our scientific community. We continue our strong presence in the social media and regularly post news on our LinkedIn Page (582 followers), LinkedIn Group (360 members) and Twitter (570 followers) accounts, Facebook (168 followers), Instagram (305 followers) and ResearchGate (115 followers). Since August 2022 our Study Group has been acknowledged in 29 scientific papers published by our members in ISI Journals. We continued supporting the new journal connected to our Study Group, "Advances in Sample Preparation", Elsevier. This year this Elsevier Journal (SAMPRE) was indexed in Scopus. The 2023 annual theme for our Study Group and Network was "Fundamentals of Sample Preparation" and a series of webinars are planned for the last quarter of 2023 aiming to reveal the complex phenomena underlying sample preparation. These webinars will be free for our members. Our Study Group supported the participation and paid the registration for: 1 PhD student attending the 7th Green and Sustainable Chemistry Conference (Dresden, Germany, 22-24 May 2023), 1 PhD student attending HPLC2023 (Dusseldorf, Germany, 18-22 June 2023); 1 PhD student attending PBA2023 (Ankara, Turkey, 2-6 July 2023); 6 PhD students attending ExTech 2023 (Tenerife, Spain, 18-21 July 2023); 1 PhD student attending Euroanalysis 2023 (Geneva, Switzerland, 27-31 August 2023). We have also given one Best Oral presentation Award to a Turkish PhD student participating at PBA2023 (Ankara, Turkey, 2-6 July 2023) Our IUPAC project entitled "Greenness of official standard sample preparation methods" that aims to evaluate current status of the greenness of the sample preparation methods used in official standard methods, proceeds as planned and after invitation we submitted one article at the IUPAC 's magazine Chemistry International. We are also organizing a round table discussion to discuss the outcome of this project during Euroanalysis 2023. The 2023-Sample Preparation Summer Course in Hradec Králové, Czech Republic (Automation and miniaturization in sample preparation) was cancelled. This course belongs to a series of courses organized by our Study Group and Network.

Activities planned for 2023-2024: In November 2023 we will organize a series of webinars where top experts of our community will presents the fundamentals behind sample preparation. These webinars will be free for our members. We hope to attract sponsorship and continue supporting the participation of PhD students in international conferences. In September 2023, we will announce the 3rd European Sample Preparation Conference (EuSP2024) and the 2nd Green and Sustainable Analytical Chemistry Conference (GSAC2024) that will occur simultaneously from 15-18 September 2024 in Chania-Crete, Greece. The two events will aim to bring together top experts from academia and industry to discuss new advancements in the fields of sample preparation and green analytical chemistry. This conference is directly related to our network. The sample preparation summer course will take place the days before the two events. We will continue our efforts on creating further policy actions for the benefit of sample preparation and our members as well as increase the visibility of Sample Preparation worldwide.

Report submitted by: Professor Elia Psillakis (Head), TUCrete, Greece

Date submitted: 2 August 2023