Study Group Name: Sample Preparation

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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 2020-2021: The Sample Preparation Network working under the umbrella of this Study Group now counts 402 members from 40 countries around the world. The network has three working groups (WG: WG1. Science and Fundamentals; WG2. Automation, Innovation and Entrepreneurship; WG3. Information Exchange and Networking) that represent the three most important directions in the field. Two publicity managers were added last year in WG3 to help with the dissemination of the information. We have a very strong presence in the social media and regularly post news on our LinkedIn Page (276 followers), LinkedIn Group (289 members) and Twitter accounts (232 followers). This year we have created a ResearchGate (73 followers). Since August 2020 our Study Group has been acknowledged in 42 scientific papers published by our members in ISI Journals and have supported 8 special issues in scientific journals covering different aspects of Sample Preparation. All committee members of our Study Group were invited speakers at the 4th STARSS Conference in Separation Science (30 Nov-1 Dec 2020; online event). An open discussion on our Study Group was included in the program. We established annual themes for our Study Group and Network. The theme for 2021 is Green Sample Preparation. A number of activities are organized aiming to promote the green aspects of sample preparation within and outside our community. We organized our 1st European Sample Preparation e-Conference, a virtual event held from 11 - 12 March, 2021. The event was supported by the European Chemical Society and the theme of our conference was "Green Sample Preparation". Participation was free for all our members. In numbers, the impact of this conference is reflected in 3 plenary lectures, 42 oral presentations, 65 poster presentation and 309 registrations from 35 countries. Our plenary speakers were from Green Chemistry: P.T. Anastas (Yale University, USA), Vania Zuin (Federal University of São Carlos, Brazil) and Nora Ventosa (ICMAB, Spain), the latter was invited to represent EuChemS Division of Green and Sustainable Chemistry. In this event, we attracted sponsorships from major companies that were deposited in the DAC-EuChemS bank account and are used for supporting PhD students members of our Network. During our conference five awards were given to PhD students (1 for the best oral presentation and 4 for the best poster presentations). Slavica Razic leaded an article published in Chemistry Europe, overviewing this Conference. We had 2 dedicated oral sessions and 2 dedicated poster sessions during XXII ExTech-2021 (Alicante, Spain; virtual event; June 29th - July 2nd, 2021) with over 60 speakers. In the same conference, we financially supported the participation of 23 European and non-European PhD students members of our network and awarded a "Best Poster award" for one PhD student giving the best poster presentation. We also planned to organize dedicated sessions during EUROANALYSIS 2021, but the event was cancelled. We covered the registration fees for 2 PhD students that will present their work during the 6th Green & Sustainable Chemistry Conference from 16-18 November 2021. Elsevier contacted us and we submitted a proposal for the creation of a new journal dedicated to Sample Preparation. The proposal was approved and "Advances in Sample Preparation" is now a new Gold Open Access Elsevier journal. Several of our network members presented our Study Group and network through articles published in national chemical societies. These included: Turkish Society of Chemists, Association of Greek Chemists (and here), Polish Chemical Society, Serbian Chemical Society, Czech Chemical Society and Spanish Chemical Society. Carlotta Turner and Elia Psillakis presented the Study Group Network during the Annual Analytical Chemistry Meeting of the Swedish Chemical Society. Elia Psillakis also presented the activities of the Study Group during the annual meeting of PortASAP (February, 10-11, 2021; URome organizer). We applied for a new 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. We received the comments by several evaluators and most likely a favourable final decision will be taken for funding this project. This will be our first policy making action. We continue our collaboration with two major global scientific magazines (LCGC and The Analytical Scientist). Two video discussion panels were presented on 17th and 18thSeptember 2020 organized by LCGC attracting more than 400 participants. In the June issue of The Analytical Scientist, Network Committee members shared their thoughts in articles covering key sample preparation issues.

Activities planned for 2021-2022: We are supporting the 2021-Sample Preparation Summer Course (Sample Preparation for MS Bioanalysis: Theory, Practice and Applications), 28 September- 1 October 2021, Bydgoszcz, Poland, which belongs to a series of courses organized by our Study Group and Network. We will organize the 2nd European Sample Preparation e-Conference as an online event that will be free for our members. We will also create the 1st Green Analytical Chemistry Conference also be free for our members and the two events will be merged in 2022. Much of our efforts will be on creating further policy actions for the benefit of sample preparation and our members.

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

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