

## Expression of Interest in Hosting Short Term Scientific Missions

### ***COST Action***

CA16215 – European Network for the Promotion of PORTable, Affordable and Simple Analytical Platforms

### ***Host institution***

Department of Analytical Chemistry, Faculty of Chemistry, University of Valencia, 46100, Burjassot, Valencia, Spain

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WG4: Sample treatment and microfluidic

### ***Research proposal of the STSM***

*Title: Preparation of 3D-printed devices for in-situ solid phase extraction*

The proposed STSM will be focus in the development of portable 3D-printed devices for *in-situ* solid phase extraction (SPE) of emergent pollutants. In this sense, the 3D printed SPE devices will be modified in order to covalently attach porous polymers. Also, to achieve high surface areas, that favors the interaction of the sorbent with the target analytes, the surface of the covalently attached polymer will be modified with high-surface (nano)materials and selective ligands. Depending on the STSM duration, the applicant will be able to design 3D models, modify 3D printed materials, synthesize porous polymers and high-surface materials and apply them to SPE of emergent pollutants.

### ***Duration and minimum qualification requested for applicants***

The duration of the proposed STSM is between 1 to 3 months.

Applicants should preferably hold a degree in Chemistry or a related subject. Previous experience with sample preparation techniques and/or analytical instrumentation is recommended.