1. Introduction
Plants and in particular tobacco plants, hemp tea leaves and flowers (a non-psychotropic species of cannabis) are well known to absorb trace elements from the soil and to accumulate them in their leaves. Some of these elements are toxic to human even in minute quantities. As they grow, plants can biosaminate metals in their tissues that originate from the soil and water in their surroundings. These metals can naturally occur in soils and water as part of their mineral content. They may also be artificially introduced in the form of fertilizers or crop protection products to increase the yields. The emerging leader in metal analysis is ICP-MS because of its high sensitivity and high sample throughput resulting from quasi simultaneous multielement data acquisition. An argon plasma as an ion source coupled with a rapid quadrupole for mass filtering are the main components of the system. Here, we explore and discuss the applicability of the Shimadzu ICPMS-2030 to the detection of the ‘Big Four’ heavy metals (arsenic, cadmium, mercury, and lead (As, Cd, Hg, and Pb)) and additionally beryllium, cobalt, chromiu, nickel, and selenium (Be, Co, Cr, Ni, and Se) in a digested hemp flower (Sativa flower) and two tobacco samples for compliance.

2. System Configuration
The Shimadzu ICPMS-2030 was used for analyses in combination with the Shimadzu AS-10 autosampler (Fig. 2). In-line addition of internal standards to calibration and unknown samples was accomplished using the Shimadzu Internal Standard Addition Kit. Based on the internal element of periodic table used for sample and internal standard comparison, the approximate dilution of the internal standard solution was 50%. High-purity reagents (Carl Roth GmbH, Germany) were used during sample preparation and dilution to ensure minimal contamination. Ultra-pure water (5 16.1 M L; Sumatra, Germany) along with trace metal grade nitric acid was used for all dilutions and acidifications. All standards and unknown samples were prepared in cleaned single-use containers to minimize any cross-contamination between analytical runs. Thanks to the discrete dynode electron multiplier de-