**ICP-MS Analyses at Keck I2C**

ICP-MS is an analytical technique used to measure the concentration of inorganic metal species within an aqueous solution. As a general rule, ICP-MS is capable of analyzing anything to the left of the metalloid boundary on the periodic table with some exceptions and varying degrees of difficulty for each specific metal of interest. Organic compounds, complexes, or molecules are not measured and are often intentionally digested into an inorganic state in order to prevent their presence from interfering with the measurement. Samples must be in acidified aqueous solution; preferably around 2% trace metal grade nitric acid, but most dilute acids will work. If your samples do not exist in an acidified aqueous state, they will have to be prepared into such a matrix. Our lab has the resources to do this for a fee. It is best to include a process blank along with your samples in order to determine the background metal levels within your experiment.

ICP-MS measurements can be very accurate and precise but can also be problematic and expensive. The Keck Lab will strive to give you the best data possible with the samples that are given to us, but we cannot be held responsible for potential problems that may occur on the customer end such as, but not limited to:

* Instabilities due to samples that were not properly acidified or stored inappropriately by customer
* Poor results due to a lack of proper method development by customer
* Poor results due to customer end experimental failure
* Lack of desired results due to lack of customer instruction
* Dissatisfaction over time required to perform analysis

Retesting of samples can be performed for additional measurement fees. Electronic or in-person consultation can be requested before and/or after an analysis. Such consultation will be free of charge unless specifically notified otherwise beforehand and will be at the complete discretion of the Keck Lab staff.

Please answer as many of the following questions as possible, as accurately as possible. More information from you can potentially lead to better data quality.

1. What are your samples?
2. If dissolved or suspended in a liquid, what is that liquid?
3. Do your samples contain organics?
4. Have your samples been put through any chemistry or processing?
5. What metals do you want to measure?
6. Do you have any additional pertinent information?