The Identification and Analysis of Salts

Abstract

The identification of salt is crucial because, each element of the structure may have an impact and influence the nature of the dilution reaction. Additionally, the concept of identifying salt is important since people can generally discover various compounds to build up that same element without negatively impacting environmental circumstances. Finding new techniques to make salt and identifying it can increase our scientific research as well as the economy throughout its entirety.

Materials & Methods

The ICP-MS and Ion chromatography (IC) are just two of the many technologies we utilize during our research. The IC ability is to measure concentrations of major cations like sodium, potassium, calcium, and magnesium in the parts-per-billion (ppb) range as well as major anions like fluoride, chloride, and sulfate. This helped us with our overall research since, before getting our results, we used ion chromatography, which helped separate ions depending on the interaction of various phases, such as the stationary and mobile phases of the sample. In addition, we utilized the scanning electron microscope whose function is to produce a largely magnified image by using electrons.

Results & Discussion

We had been analyzing some of the elements during our investigation, but we weren't aware of their chemical composition. We were given two salts that, depending on the outcome of our investigation, would produce either a high or low concentration of each sample. We used a variety of techniques during our research and development to identify the salt they were, such as ingesting several samples at varied induction periods.

As previously noted, we received a sample to test. In our second attempt to test the sample, we were looking for sulfate and discovered that it had not been as noticeable as chloride. We concluded that the salt had been a chloride salt with little to no sodium sulfate present.

Takeaways

My excitement for the course material has grown, and I enjoyed working in the lab. I was first a little worried, but as time passed, I developed an interest in a profession associated with the one I am in. Additionally, the mathematics used in the curriculum at the institution that was pursued helped me and allowed me to keep learning new topics. I want people to know that even though it could be challenging, your team is here to answer any issues. I learned that in order to gather accurate data and analysis while working in a lab, you must be extremely patient.

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