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# Letter to Georg Bredig from his nephew, November 1908

"Letter to Georg Bredig from His Nephew, November 1908," November 26, 1908. Papers of Georg and Max Bredig, Box 2, Folder 27. Science History Institute. Philadelphia. <u>https://digital.sciencehistory.org/works/2kivktj</u>.

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Translated by Jocelyn R. McDaniel

## **English Translation**

#### Image 1

Berlin, November 26, 1908

Dear Georg,

Thank you very much for your nice, detailed letter, which I intend to answer soon. I was very interested in your news from the laboratory. It's disappointing that the facility wasn't approved, but that's the way it is. I would like to know if it's possible to obtain a reasonably priced transformer to convert direct current to alternating current. Maybe we could then look into purchasing belt transformers at a lower cost. I will write you with more details about this.

### Image 2

(page 2)

Regardless, we must be very cautious with the 500 Marks. Something unexpected always seems to occur. Personally, I will be using a Friedrich stove soon, as it is inexpensive and practical.

When it comes to representing metals in diagrams, I suggest using the electrical case instead of the Göttingen school case: Zu, Cd (Hindrichs, Journal of Applied Chemistry 55, page 415, 1907), which found that the electrical case is more versatile, cost-effective, and suitable for use at lower temperatures. Additionally, it allows for cleaner cuts compared to lead. However, it may not be a popular choice at the moment. Glass is typically used as the vessel material. For the construction of the oven, the following materials would be suitable: asbestos lid, asbestos coat, iron crucible with sand, iron ring, and 3 burners for higher temperatures /Gellare.

#### (page 3)

I suggest using the Mg-Su connection (with an open value) as described by Ruer (on page 90). The connection has a higher melting point than its components, and temperatures of up to 800°C can be easily achieved in the furnace. It's important to observe holding times during the process. I can make the necessary cuts, but unfortunately, you don't have a microscope to observe them.

Stern is doing quite well. He always asks about you with great enthusiasm and is generally very faithful. Last Monday, I gave a presentation on pure fermentation work at our colloquium, which had a great impact. Little Karl Arndt was also in attendance.

There isn't much to say about me. Although I am learning a variety of things, my main focus is on mastering the most important metallurgical processes. In addition, I am also learning about porcelain, which was once used to deliver marzipan.

## Image 3

#### (page 4)

Although hardly known in scientific laboratories, there are some nice methods for determining Fe that I already know and am trying to apply. Specifically, I am working with ZnS and charcoal, which may not yield any significant results, but it doesn't hurt to try. Other than that, everything is going well except for my overall mood, which is unfortunately quite low without any discernible reason. Today, I spent two hours listening to a lecture on gas seals at the university. Mielle is doing great!

At the beginning of next week, I will probably visit Mansfeld to see the copper works. I plan to combine this trip with a visit to Halle.

My father is still not feeling well. Fortunately, his mood has improved a bit, and he is receiving treatment. However, he...