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Letter from Georg Bredig to Max Bredig, December 22, 1937

Bredig, Georg. “Letter from Georg Bredig to Max Bredig, December 22, 1937,” December 22, 1937. Papers of Georg and Max Bredig, Box 7, Folder 13. Science History Institute. Philadelphia. https://digital.sciencehistory.org/works/r9j4uuo.

Translated by Jocelyn R. McDaniel

English Translation

Image 1

Professor Dr. G. Bredig
Karlsruhe i.B.
Bahnhofstr. 14.

December 22, 1937
Mx 51

Enclosed: 1 return postal slip

Dear Son,

I extend my warmest congratulations to you on the occasion of the New Year. I hope it brings you good health, success in your work, and the joy of a new home. I am grateful for your two letters, dated November 29th and December 5th, which I received on December 9th and December 16th respectively. I had a wonderful Christmas and New Year’s Eve, though I couldn't help but feel a little nostalgic for the days of my youth. Our friends over

there also kindly asked after you, hoping that you were not feeling too lonely. On December 18th, I wrote to Fajans and his wife, though it was later than I intended. I apologize for my slow response, but it's a consequence of my age catching up to me. Time seems to fly by, and I accomplish much less than I once did. I’m pleased to inform you that on December 20th, we finally sold almost all of your blocked marks after receiving official approval. You will be notified of this by the local bank, and the transfer will be made to your local bank. Please be smart and responsible with this money, as it is a nest egg that should help you through a period of no income. However, it will not be enough to last more than 20 months, even when living modestly. Therefore, you are completely dependent on yourself. Keep this nest egg in a solid currency or safe in the bank, and resist the temptation of risky investments, lending out of goodwill, or higher interest rates. You must support yourself. Your stocks have not been released, although the ministry promised to do this as soon as possible. We hope to receive them in the near future.

(left margin)

Don’t forget to wish Berl and other friends a Happy New Year! According to the Frankfurter Zeitung No. 648/649 dated December 21, 1937, a large hydroelectric nitrogen plant was reported to be operation in Tennessee.

Image 2

(page 2)

The cost for shipping your books (list II and list of the journals) would need to be calculated beforehand. Your sheet music, which is still stored here, weighs around 20 kg. As a postal package, it may cost around 16 R.M. I sent you the November and December 1937 issues (No. 11 and 12) of the Journal of Electrochemistry as registered printed matter. You’re probably experiencing deep winter by now. I hope the heating in the laboratory and apartment is good. I also hope you can go skiing during the Christmas holidays without any accidents! Did Ernst C. from Utrecht send you the special reprint (from the Academy of Sciences) about the conversion of tin? There is a significant body of literature on iron carbides. If you’re interested, you may want to look into the work of Schenk (Journal of Electrochemistry 42, 569 (1936)) and others. Regarding the Gmelin handbook on polarized light, I’m not sure how to proceed. As for the conversion rate of salt-like solid phases, van’t Hoff established a rule approximately 30 years ago that states that the conversion takes place more slowly as the “average valence number” of the ions present in the solid phases increases. For example, salts with 1-valent ions convert more quickly than some calcium salts, phosphates, or borates. (Compare van't Hoff, Ocean Salt Deductions* Bol Heft II

(1909) pp. 51, 57, 66, 64, 67, 13 (Publisher: Vieweg Braunschweig)). It is unclear whether this rule applies to calcium phosphate and aragonite, so I’m unable to make a judgment on that matter.To the best of my knowledge, attempts have been made to modernize the justification of van't Hoff's valence rule. It’s possible that the rearrangement of lattice components through chain migration during conversion occurs more easily and frequently when fewer electrons hold it, i.e. the “average valence.” Additionally, you may find suggestions regarding the question you posed in your letter dated November 29, 1937, in the works of Carl Wagner Smekal (conductivity, lattice gaps), Hüttig, Thyssen, Kander, and Fricke - whom you may be familiar with. Can you observe the formation of duplicities in crystals during transformation or when they undergo mechanical stress by using X-ray cinematography? The fact that you have found an explanation for the uptake of sodium and sulfate carbonates must have pleased the local mineralogist and Mr. Tomassen. I hope this was proven. I remember Mr. Pfirrmann’s dissertation from my laboratory where CaSO4-anhydrite crystals reacted with lime and Na2S4 solution to form a ternary compound. The crystals of this compound, when viewed under the microscope, were confusingly similar to those of anhydrite. They could only be distinguished from anhydrite by their direction of extinction, which was perpendicular to that in the anhydrite crystals.

(right margin)

I haven’t received a reply from the publisher regarding the new edition of the Tolhausen Lexicon yet. Marianne says hello and recently wrote to you. She is always busy. Currently, Aunt Vally is visiting me on vacation. Best wishes to you and all our friends for the New Year. Mrs. Cotiaux also says hello.

Father

(left margin)

Have you received Guertler’s book “About Ore”? Should I ask H.H.F if he received your three letters? I can send you the last 10 years of the journal, but the value of the rest may be diminished.

*I can send you the book, and you can also refer to meeting reports of the Royal Prussian Academy of Sciences (Physics/Mathematics Series, July 12, 1906 p. 566.).

Additionally, I believe it would be more appropriate to share my memories after my 70th birthday.