

**THE PROBLEM OF "ZERO ELEMENTS" IN THE WORKS
OF D.I. MENDELEEV.
NEUTRON MATTER AND ITS PLACE IN THE PERIODIC TABLE
OF CHEMICAL ELEMENTS**

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D.I. Mendeleev was convinced of the existence of elements before hydrogen¹. Elements before hydrogen inevitably fall into the zero group. "This position of argon analogs in the zero group is a strictly logical consequence of the understanding of the periodic law," stated D.I. Mendeleev. He allowed the existence of the elements - X ("newtonia") and Y ("coronia") before hydrogen in the zero group. It should be recalled that Mendeleev had not been mistaken in his predictions of new elements! It should be noted that after D.I. Mendeleev's question about "zero" elements was repeatedly raised by many authors both in the past and in the present centuries, however, for brevity, we only mention the very first and most famous ones: for example, Ernest Rutherford in 1920 and Andreas von Antropoff in 1926 as a designation for a hypothetical element with atomic number zero, which he placed at the beginning of the periodic table. A. Antropov was the first to suggest the term "neutronium"². Currently, neutron matter, like neutron stars, is a recognized reality in astro- and nuclear physics. Neutron matter from the standpoint of General chemistry can be classified as chemically simple (i.e., cannot be decomposed into simpler chemical means), then inevitably the question arises about the Element corresponding to it and its place in the Periodic System. Based on the logic of the Periodic Law - (sequence number - electric charge) - the sequence number of neutron matter will correspond to zero, which makes us remember and develop the ideas of Dmitry Ivanovich Mendeleev about the zero group and period³.

References

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