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THE POSSIBILITY OF Ce³⁺ AND Mn²⁺ COMPLEX IONS FORMATION WITH IODINE SPECIES IN A DUSHMAN REACTION

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Abstract. This contribution presents investigations into possible effects of Ce^{3+} and Mn^{2+} on the reduction of UV-spectral signal for I_3 observed e.g. in the Dushman reaction. The potential of the metal ions to form complexes with iodine-containing species was analysed. It was shown that no complex ions are formed between Ce^{3+} and Mn^{2+} metals ions with IO_3 , Γ , I_2 species. Only the formation of a very weak CeI_3^{2+} complex ion was found to occur. An effect of a complex formation on the studied systems could be excluded.

Keywords: Dushman reaction, cerium ion, manganese ion, iodine specie.

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