

## RECOMMENDATION LETTER

The article “**STRUCTURE OF AS-QUENCHED Al-V-Fe METAL RIBBONS**» (authors: O.Shved, S.Mudry, V. Girzhon and O. Smolyakov) is dedicated to the research of the structure appearing in rapidly quenched Al-V-Fe alloy family. In the conditions of rapid cooling such alloys demonstrate the ability to form metastable icosahedral quasicrystalline phases. Even now the nature and mechanisms responsible for the formation of such phases is not fully understood, hence the work is considered to be actual.

The authors managed to achieve a number of interesting results, such as experimental proof and explanation of the possibility of the formation of two icosahedral phases with different quasi-lattice properties in aluminum based alloys with low transition metals content. The simultaneous coexistence of these two phases was proven and analyzed in the quenched alloy  $Al_{94}V_4Fe_2$ . Furthermore, the impact of the transition metal content in Al-V-Fe alloy family on the type of icosahedral phase obtained is demonstrated.

The work is valuable and contains new scientific facts. I consider it to be worth being published in the magazine **Physica B: Condensed Matter** (section - *Materials physics (physical characterisation with a proper discussion of the physics)*)

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