

## The magnetic properties of the alloys Pb-Sc

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### Abstract

Using the vibrational magnetometer, we experimentally investigated lead alloys containing up to 6 at.% of scandium in the temperature range  $T = 4-300$  K. It was found that all the samples possess superconductivity at temperatures below 7 K. In normal (non-superconducting) state all the studied alloys exhibit diamagnetic properties. It has been established that scandium nonmonotonically modifies the magnetic properties of alloys. The results are discussed on the assumption of the existence of lead in the basic matrix of nanoscale dispersoids of scandium intermetallics.