

Dear Colleague,

Here I will give a short proof that the 373K type Superconductors are not ferrites following the text you mailed me.

"The [previous pictures](#) and [videos](#) of Kostadinov's samples exhibited an apparent behavior of ferrites. They were never shown to levitate above magnet, they just did stay upright on it or hanged down. Also the behavior of sample demonstrated above resembles the behavior of ferromagnetic material during heating above the Curie point rather than superconductive transition.

[Is it really how the room superconductor should behave?"](#)

To begin with I am not assuming any particular behavior of any of the objects I was studying in my long work on their synthesis. I was testing them with all available instruments in our Laboratory on Superconductivity. It included invariably T variation from 10 K up to room temperature and when the temperature went above 100 C (373 K approximately) also a substantial heating. A very minuscule part of this work was presented in my article in arxiv. The criterion for superconductivity was well defined- negative susceptibility with a well defined transition temperature and zero resistance transition with a well defined resistance variation.

Thus no ferromagnetic behavior or similar was to be taken for superconductivity. And at the time this work was done the Fe group of superconductors were not found.

Any attempt to assign or introduce the ferromagnetic or anti or variations of both in the discussion has no ground. Besides, is there a discussion?-nobody wrote a scientific argumentation against my work -only few wrote to me- "you should give us the technology"- and " too high Tc" one colleague told me. There are higher, I mentioned to a third colleague, but he was not interested? All this after many conferences and books and even a question addressing the future generations -100 years from year 2000. "Do you use room temperature superconductors? ".

To, however, simplify the understanding of what one observes with the 373K material I will repeat the observations I gave in one of my postings on the 373K Superconductors site:

On a strong magnet (above 1 T field in the central area) the 373K disk shaped samples stay vertical so that the magnetic field is parallel their surface as it is typical for Meissner effect.

When various flat magnets with a disk type shape are placed on a 373K superconductor they stay upright against the gravity force. I mentioned in the text accompanying the image that when placing several such small magnets each one on a 373K disk they all orient along the magnetic field of the Earth.

If you slowly rotate one such superconducting disk under one of these magnets the magnet stays still oriented the same as all the others, along the Earth magnetic field (less than one Gauss in my Lab).

I am not mentioning again the facts from the arXiv 373K Superconductors article- about the Shapiro steps in the Josephson Junctions etc.

Now the next text is from your article.

"I'd perceive somewhat ridiculous, if the emeritus professor of superconductivity and official [superconductor record holder](#) would confuse ferrite with superconductor - but this is how the story looks for me by now. But we should also realize, that the ferromagnets are sorta degenerated superconductors at the quantum level - so that the difference between superconductor and ferrite may not be so apparent at the case of room temperature superconductor."

I hope you see a difference now.

With best regards.

Ivan Kostadinov