



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_27184
Title of the Manuscript:	Magnetic properties of a quasi-two-dimensional Heisenberg antiferromagnet -RbCrF4
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	1. The authors make a conclusion that there is a superstructure in the ab-plane due to the X-ray diffraction measurements. It is instructive to make a self-consistent analysis if this manifests itself in the magnetic susceptibility measurements. If done, the experimental data could be unified into a research article, otherwise it is only a experimental report. 2. The authors used Fig. (2b) to demonstrate that they obtained a high-quality sample by using the RS-method. While there are two curves in this figure, it is hard to understand how we can make this conclusion. The susceptibility increases with lowering the temperature in the usual method measurement, and the authors explained this increase in terms of impurity-induced weak ferromagnetic moment. It is also hard to draw this conclusion. The authors should provide strong demonstrations. 3. In Fig. (4a), there are two peaks showing up in the susceptibility vs. the temperature. A sharp one is claimed to be the Neel transition, while a broad one has not got a clear explanation. It is not a right way to only package up the data for a scientific paper. And the authors should explain clearer about "g-value of each inequivalent magnetic site". There are some places which should get minor modifications. The equation in line 180 should be	



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	modified. The form of equation is not standard. And language of some sentences should be modified, for example "...is because of...".	
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		

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