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REVIEW

On PhD thesis entitled "***Evolution of the geomagnetic field strength in the European part of Russia in the second millennium of our era***"

Presented by **Natalia Salnaia**

To obtain the degree of candidate of physical and mathematical sciences, specialty 1.6.9. Geophysics, St. Petersburg State University.

The manuscript presented contains first rate, high-standard archaeomagnetic investigation including very detailed rock-magnetic survey and successful absolute palaeointensity (archaeointensity) determinations using three-axis vibrating sample magnetometer developed by Maxime Le Goff (Le Goff and Gallet, 2004). Continuous high-temperature magnetization measurements proved to be very efficient tool in order to retrieve the strength of Earth's Magnetic Field from backed archaeological artifacts (essentially bricks). The methodology employed considers and mitigates the effect of thermoremanence anisotropy and thus represents a great experimental advantage comparing to conventional palaeointensity techniques. General intensity trends for the European part of Russia show some discrepancies with the global geomagnetic models but are more compatible with the French geomagnetic field intensity variation curve. Because of great geomagnetic significance of the obtained results and the rigor of the experimental methodology, the study may be considered as of exceptional scientific level. To summarize my opinion, the dissertation of Salnaia Natalia : "The evolution of the geomagnetic field strength in the territory of the European part of Russia in the second millennium of our era" meets the basic requirements established by Order No. 11181/1 of November 19, 2021 "On the procedure for awarding academic degrees at St. Petersburg

State University". The applicant Salnaia Natalia definitively deserves to be granted the degree of Candidate of Physical and Mathematical Sciences in specialty 1.6.9. Geophysics. Violations of paragraphs 9 and 11 of the specified Procedure were not found in the dissertation.

Prof. Avtandil Gogichaishvili

Member of the Dissertation Council

Institute of Geophysics, National University of Mexico, UNAM

Head of National Archaeomagnetic Service.

Sabbatical at Geophysics, Department of Physics, University of Alberta, Edmonton.