



REVIEWER'S OPINION OF FINAL THESIS

I. IDENTIFICATION DATA

Thesis name: Low offset drift - low noise orthogonal fluxgate with synchronized polarity flipping

Author's name: Iurie Coroli

Type of thesis :

bachelor

Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.

The thesis focuses on the design and implementation of a novel method of operation of orthogonal fluxgate sensors for the measurement of magnetic fields compensating for the offset of the output signal induced by magnetic anisotropy and its time and thermal drift.

The manuscript spans from the basic physical principles of orthogonal fluxgate magnetic sensors to the most advanced engineering methodologies and systems combining digital signal processing, hardware implementation, code development and data analysis.

Formal and language level, scope of thesis

A - excellent.

Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.

The formal notation across the whole thesis is correctly used and the language is clear and precise. Concept are expressed in a clear and effective manner allowing also to a not specialized reader to grasp the main concepts and ideas. The thesis is overall well written and readable.

Selection of sources, citation correctness

A - excellent.

Present your opinion to student's activity when obtaining and using study materials for thesis creation. Characterize selection of sources. Assess that student used all relevant sources. Verify that all used elements are correctly distinguished from own results and thoughts. Assess that citation ethics has not been breached and that all bibliographic citations are complete and in accordance with citation convention and standards.

The cited references are all relevant and properly selected. The student and his supervisor demonstrate to have a wide vision of the field; the main results are clearly contextualized and distinguished from the existing ones. All bibliographic citations are complete and in accordance with citation convention and standards.

Additional commentary and evaluation

Present your opinion to achieved primary goals of thesis, e.g. level of theoretical results, level and functionality of technical or software conception, publication performance, experimental dexterity etc.

The work presented in the thesis demonstrates the successful achievement of the primary goal of the project. The main outcomes are original, with a high technical and theoretical content demonstrated by the use of advanced measurement methods, hardware systems and implemented softwares. The student demonstrates a solid theoretical background supported by a critical ability for data analysis and good operative skills. At the same time he has earned a mature working methodology.