

## BRIEF ARTICLE

# Experimental research of the second component of the electromagnetic field.

Project RWA: R&D on the second component of EMF (RWA RD SCEMF)

Research and development work on the second component of the electromagnetic field.

Before reading the article, it is recommended to have an overview of the short description of the second component of the electromagnetic field (SCEMF). For a reason of complexity and non-standard material, the information in the brief article is presented in the simplest form. In the brief article the presented information concerns conducted analysis about self-restrictions in modern science.

The result of researches concerning real physical phenomena of nature adjusted for fundamental and basic calibrations, which closes the door to knowledge for humanity, is presented. It is suggested to realize it and reveal.

Everyone is familiar with the fundamental theorem of Stokes and Helmholtz field theory, which describes liquid and gas flow. There are different mathematician approaches to describe it. Let us describe one of them, mainly the integral-differential representation, which consists of two components:  $\text{rot}H + \text{grad}H^* = J$ . The presented theorem is beyond question, it agrees with observations and experiments, and has no objections and contradictions.

Recognizing difference between fields and their properties as well as understanding that mathematical description of the field theorem corresponds to well-known fields, the calibration of Coulomb should be considered. Basing on experiments with iron fillings, this calibration repeals one of the components of the electromagnetic field (described mathematically). As the result, from two components, specifically the CURL and the DEVERGENCE, we use only the CURL in modern science.

Analysis of publication of this theme demonstrates that a lot of scientists have already researched the scalar component of the electromagnetic field. In the scientific literature [1], [2], [3], authors analyse carefully the question of inconsistency and present their theories confirming them partially or even fully through experiments. It is quite conceivable that distribution of currents according to the Stokes and Helmholtz theorem are not equal to zero:  $\text{rot } j \neq 0$  and  $\text{div } j \neq 0$ .

As a result of project work, mainly a laboratory machine engineering, a condition was stated under which scalar sources and effluents of the electromagnetic field repealed by Coulomb's calibration allocate in the maximum possible condition and lock into the toroid [4].

It is reliably known that under this condition sustainable vortex can be created in different areas. It is assumed that the electromagnetic field is not exceptional. It has been

established by research that the second component does not interact with iron filings, but interacts with the electric current in the conductor and with a similar component.

As a result, the scalar part of the electromagnetic field was not reflected in the descriptions and was not discovered before. The most important is the established interaction of the scalar electromagnetic field with gravity. Basing on the described theoretical and practical data above, Project RWA R&D on the second component of EMF was founded, where:

- The modelling of the electromagnetic field in its full description [ $\text{rotH} + \text{gradH}^* = \text{J}$ ] using the MATLAB® software was carried out, which confirms the condition for the second component in the maximum form allocation (Figure). Engineering of the laboratory machine is going on.

- The laboratory machine was created to study the second component of the electromagnetic field. At the moment the experiments which have been carried out partially confirm both the scientific theory and research. Work is underway to modernize and improve it. Upgrade and enhancement works are going on.

The above data and conclusions correspond to a published scientific survey [5], which states that during the tests, the researchers achieved a sustainable effect of the explosive acceleration of laboratory machine and its interaction with gravity. With that, during rotation in one direction weight gain was recorded but in the opposite direction the weight reduced. The authors of the article note that the weight of the laboratory machine varied up to 35% depending on the speed and rotation direction. The laboratory machine was launched steadily and functioned within 6 months, as well as demonstrated stability and proved the same results.

The research also revealed some of interesting effects. However, while the second creation of machine in some years the lack of authors' theoretical knowledge did not allow to achieve the same desirable effects. One of the directions for the development of the project is the creation of super-fast space movement in terms of the theoretically reasonable possibility [6].

With the help of engines, creation of which will base on the research concerning the second component of the electromagnetic field, it will be possible to achieve needed effects about curving the space which in turn will allow moving super-fast in different environment over long distances.

Email for suggestions and cooperation: [rd@rwa.ua](mailto:rd@rwa.ua)

Telephone: +380 50 323 6773

References:

- [1] Links on request
- [2] Links on request
- [3] Links on request
- [4] Links on request
- [5] Links on request
- [6] Links on request

Email for suggestions: [rd@rwa.ua](mailto:rd@rwa.ua)

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